SERVICE CATALOG . . . NO. 47-1

A.I.A. FILE No. 29-C

ZURN

BUILDING PLUMBING DRAINAGE PRODUCTS

2052 St Catherine W.

Roof to Basement

K H Tremaine

This Catalog Contains

Full Data on:

"Canadian Zurn Industries Ltd"

DRAINS

INTERCEPTORS

TRAPS

WALL FIXTURE CARRIERS

WALL CLOSET FITTINGS

HYDRANTS AND STREET WASHERS

SWIMMING POOL EQUIPMENT

Everything for

Building Plumbing Drainage

ENGINEERED PROTECTION FOR

HUMAN HEALTH AND MODERN STRUCTURES

A.I.A. FILE No. 29-C

J. A. ZURN MFG. CO. *Plumbing Division* ERIE, PA., U. S. A.

SERVICE CATALOG

No. 47-1

Revised Edition, March, 1951
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BUILDING • PLUMBING • DRAINAGE PRODUCTS

This catalog is intended as a combination price guide and catalog for quick and easy specification reference. It contains complete tables of sizes, weights and dimensions, together with engineering drawings for every item. Plumbing products not shown herein are contained in other Zurn literature, available upon request.

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MEMBER OF PRODUCERS' COUNCIL, INC.

J. A. ZURN MFG. CO., PLUMBING DIVISION, ERIE, PA., U.S.A.

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ROOF DRAINS . . . Pages 4 to 13

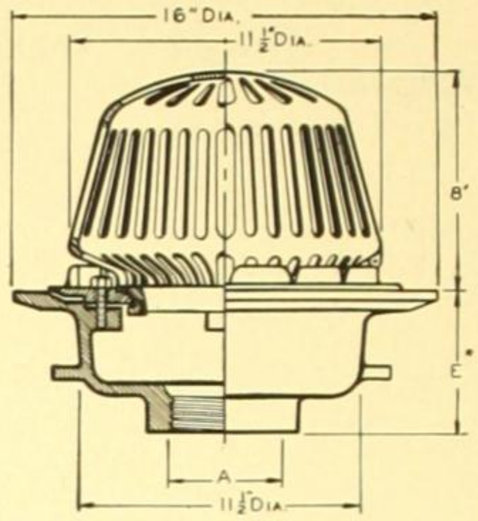
FIG. Z-100 ROOF DRAIN, High Velocity Discharge

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	5¼″	$24.00	$40.20	$ 92.20	49
5″	5¼″	29.30	48.60	109.10	50
6″	5¼″	32.30	54.90	133.40	51
8″	5¼″	45.00	74.10	192.50	52

Caulk outlet available, see Z-100A.

Extra large, removable, non-clogging, mushroom dome strainer. Clamping collar of vise construction assures tight joint.

Open Area Ratio of Dome Orifices to Outlet
2″—35:1 4″—9:1 6″—4:1
3″—16:1 5″—6:1 8″—2:1



I.P.S. Outlet

Z-100

Furnished With or Without Anchorage Lugs

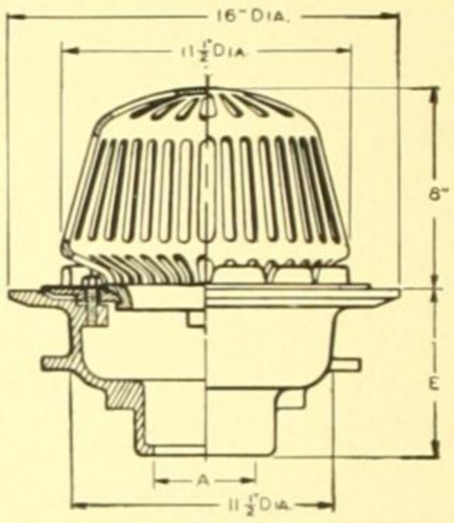
FIG. Z-100A ROOF DRAIN, High Velocity Discharge

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	6¾″	$24.00	$40.20	$ 92.20	49
5″	6¾″	29.30	48.60	109.10	50
6″	6¾″	32.30	54.90	133.40	51
8″	7⅜″	45.00	74.10	192.50	52

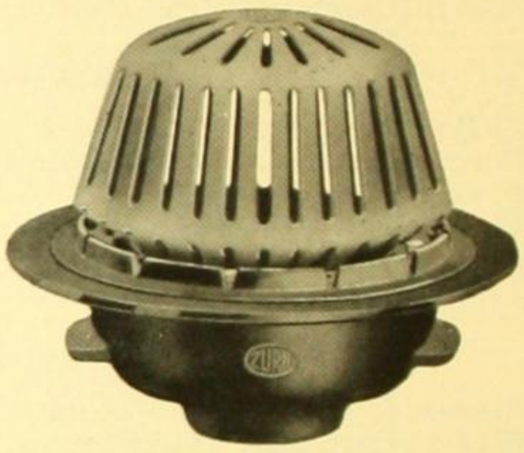
I. P. S. outlet available, see Z-100.

Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet
2″—35:1 4″—9:1 6″—4:1
3″—16:1 5″—6:1 8″—2:1



Caulk Outlet


Z-100A

Furnished With or Without Anchorage Lugs

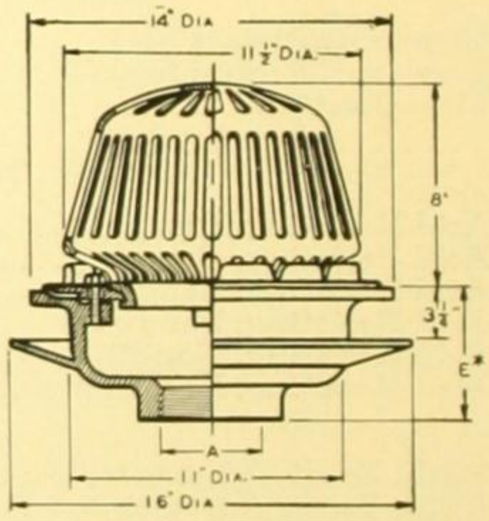
FIG. Z-101 ROOF DRAIN, With Seepage Pan, High Velocity Discharge

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	5¼″	$36.00	$60.20	$138.20	55
5″	4⅞″	41.30	68.40	153.60	56
6″	5″	44.30	74.70	174.70	57
8″	5¼″	57.00	94.50	207.40	66

Caulk outlet available; "E" dimension approximately 1½″ longer.

Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet
2″—35:1 4″—9:1 6″—4:1
3″—16:1 5″—6:1 8″—2:1



Z-101—I.P.S. Outlet

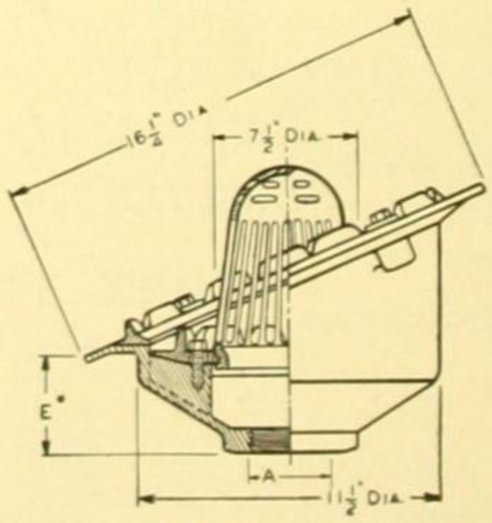
FIG. Z-102 ROOF DRAIN FOR INCLINED ROOF

Pipe Size A	E	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Dome Coated (CB)	With Bronze Dome Galv. (GB)	All Bronze (BR)
2-3-4″	3⅞″	$31.50	$49.40	$42.80	$60.20	$127.40
5″	3⅞″	39.00	60.30	51.00	71.90	152.10
6″	3⅞″	40.20	68.00	57.40	81.90	187.00

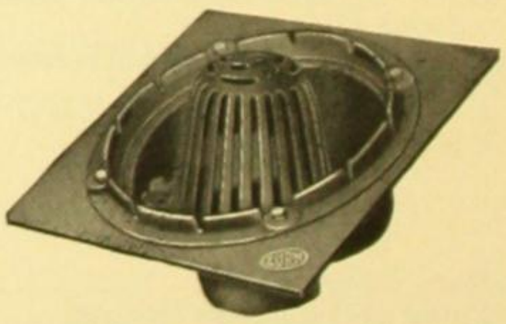
Approx. Wt. Lbs. 2″-3″-4″—43, 5″—44, 6″—45.

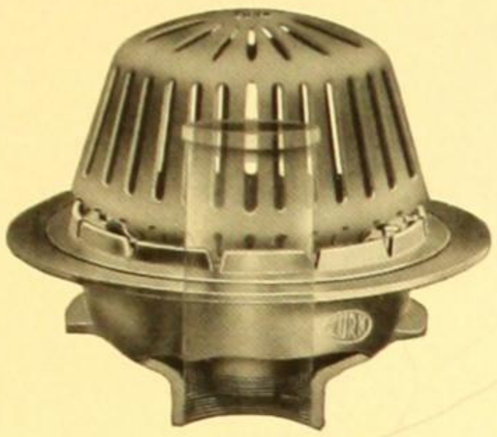
Caulk outlet available; "E" dimension approximately 1½″ longer.

Standard pitch—22°30″(5″ per ft.). Available at different angles according to requirements.

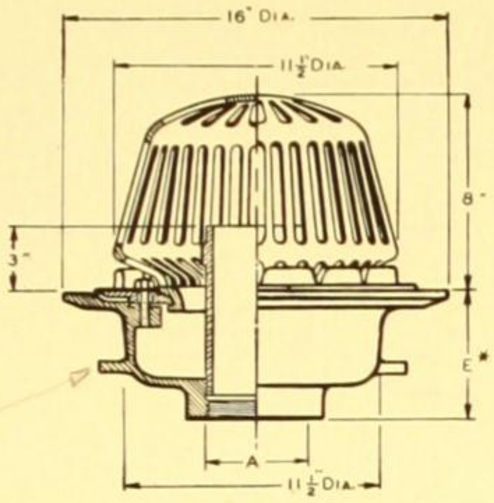


I.P.S. Outlet


Z-102



Z-103



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

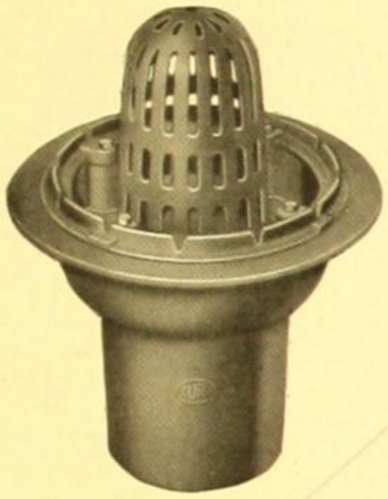
ROOF DRAIN — FIG. Z-103

With Adjustable Water Level Regulator, For Water-Insulated Roof

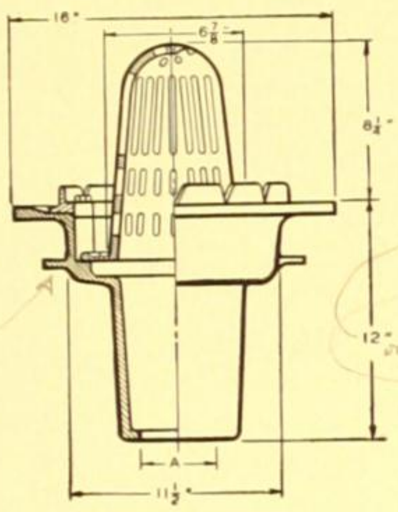
Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (Br)	Approx. Wt. Lbs.
2"	6¼"	$36.00	$57.60	$138.20	61
3"	6⅜"	39.00	63.00	149.80	63
4"	6⅜"	42.00	68.40	161.30	64

Caulk outlet available; "E" dimension approximately 1½" longer.

3" water level shown; can be made to specification. Extra large, removable, non-clogging, mushroom dome strainer.



Z-104-1



Caulk Outlet

Furnished With or Without Anchorage Lugs

ROOF DRAIN With Long Outlet — FIG. Z-104-1

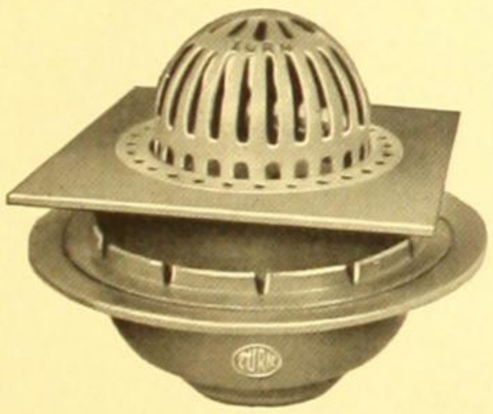
Pipe Size A	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Dome Coated (CB)	With Bronze Dome Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
4"	$24.00	$40.20	$35.30	$51.20	$ 92.20	66
5"	29.30	48.60	41.30	60.20	109.10	68
6"	32.30	54.90	46.50	68.70	133.40	70

I. P. S. outlet available.

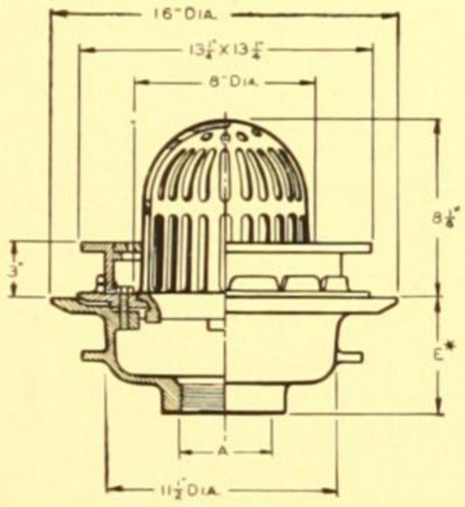
ROOF DRAIN WITH STANDARD LENGTH OUTLET — FIG. Z-104-2

Pipe Size A	Top of Pan to Outlet
4", 5", 6"	6⅝"

Fig. Z-104-1 Prices Apply



Z-105



I.P.S. Outlet

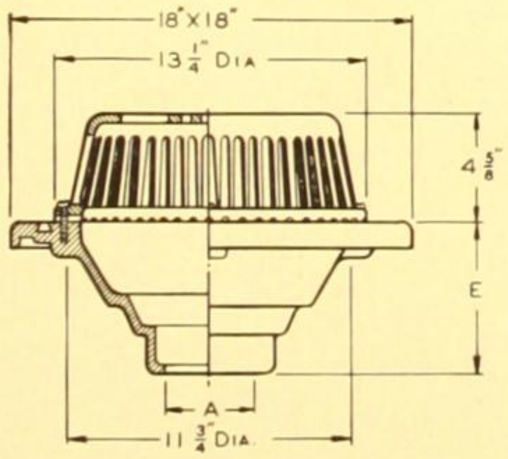
Furnished With or Without Anchorage Lugs

ROOF DRAIN With Tile Frame — FIG. Z-105

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	5¼"	$33.00	$52.90	$106.60	60
5"	5¼"	38.30	61.20	123.50	61
6"	5¼"	41.30	67.50	147.80	62
8"	5½"	54.00	86.80	206.90	63

Caulk outlet available; "E" dimension approximately 1½" longer.

Z-106



Caulk Outlet

ROOF DRAIN—CAULKED FLASHING TYPE — FIG. Z-106

Pipe Size A	E	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Dome Coated (CB)	With Bronze Dome Galv. (GB)	All Bronze (BR)
3-4"	6¾"	$32.60	$51.10	$43.50	$63.50	$ 94.10
5-6"	6¾"	35.00	54.00	47.00	66.60	99.80
8"	On request	39.00	60.30	51.50	72.00	104.00

Approx. Wt. Lbs. 3"-4"—56, 5"-6"—58, 8"—60.

I. P. S. outlet available.

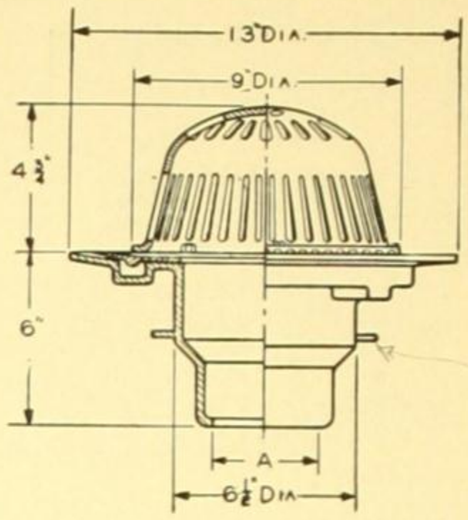
Metal flashing can be bent over and caulked into flashing seat.

These have no provision for clamping down to Roof deck

FIG. Z-107 ROOF DRAIN—Recessed Clamping Surface Type

Pipe Size A	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Dome Coated (CB)	With Bronze Dome Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	$18.50	$30.20	$24.40	$36.90	$53.80	37

Provides firm anchorage for soft flashing when formed into the recess.



Caulk Outlet

Z-107

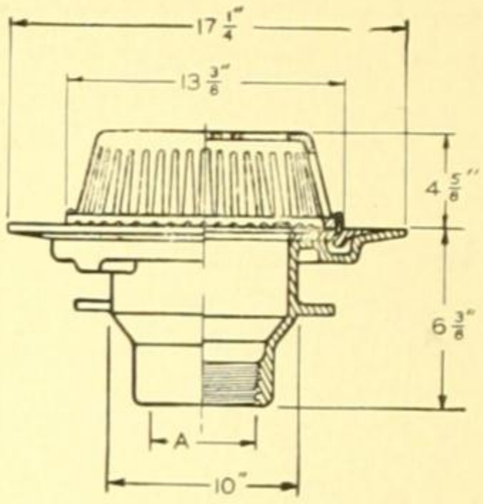
Furnished With or Without Anchorage Lugs

FIG. Z-108 ROOF DRAIN—Recessed Clamping Surface Type

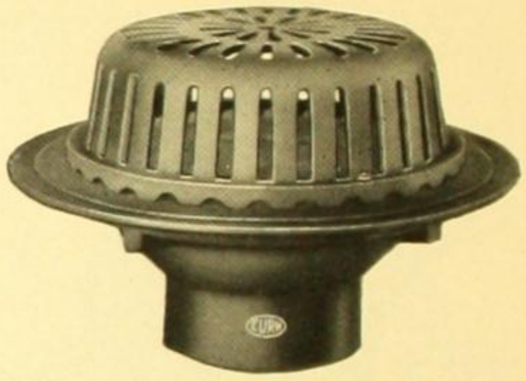
Pipe Size A	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Dome Coated (CB)	With Bronze Dome Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
5″	$29.30	$48.60	$41.30	$ 60.20	$109.10	53
6″	32.30	54.90	46.50	68.70	133.40	54
8″	45.00	74.10	77.30	107.00	192.50	55

Caulk outlet available; outlet approximately 1½″ longer.

For same service as Z-107 above.



I.P.S. Outlet



Z-108

Furnished With or Without Anchorage Lugs

FIG. Z-115 ROOF DRAIN With Side Outlet

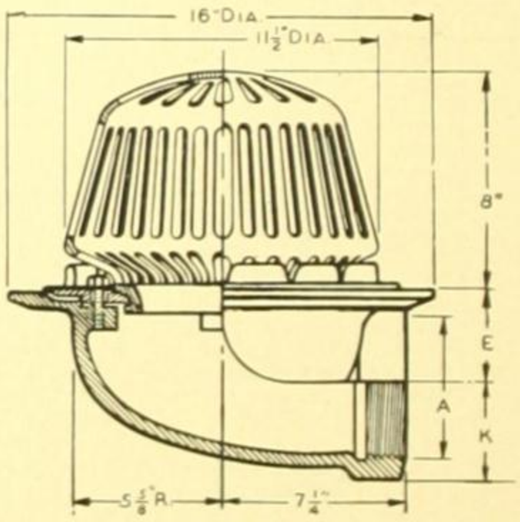
Pipe Size A	E	K	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	6⅛″	2⅜″	$31.50	$52.80	$127.40	68
3″	5⅝″	2⅞″	31.50	52.80	127.40	69
4″	5 1/16″	3 7/16″	31.50	52.80	127.40	70
5″	4 11/16″	3 13/16″	39.00	65.70	152.10	71
6″	4 5/16″	4 3/16″	43.20	74.50	187.00	72

Caulk Outlet Available.

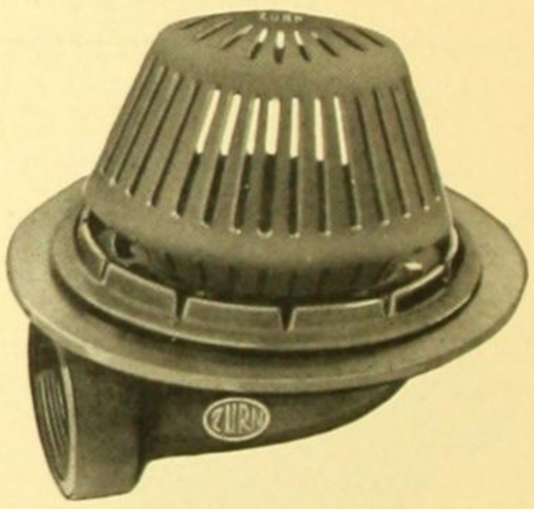
Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2″—35:1 3″—16:1 4″—9:1 5″—6:1 6″—4:1



I. P. S. Outlet



Z-115

FIG. Z-118 ROOF DRAIN With Hinged Dome

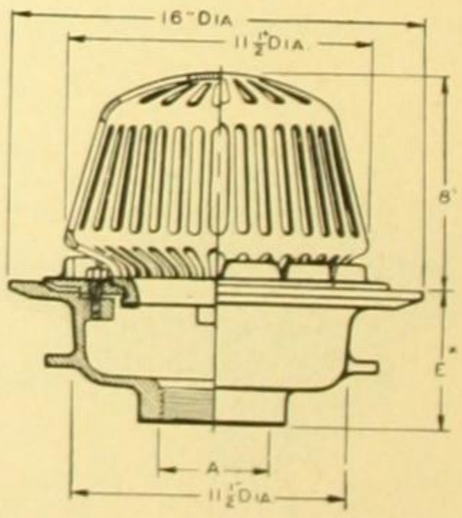
Pipe Size A	E	Coated Iron Dome	Coated Bronze Dome	Galv. Iron Dome	Galv. Bronze Dome	All Bronze (BR)	Approx. Wt. Lbs.
2″	5¼″	$42.00	$54.00	$61.20	$75.60	$112.00	52
3″	5¼″	42.00	54.00	61.20	75.60	112.00	53
4″	5¼″	42.00	54.00	61.20	75.60	112.00	54
5″	5¼″	57.00	72.00	82.80	100.80	130.70	55
6″	5¼″	72.00	90.00	94.40	126.00	183.80	56
Hinged Dome		12.00		25.20		33.60	
Clamping Collar and Retainer		7.50		12.60		19.20	

Caulk outlet available; "E" dimension approximately 1½″ longer.

Extra large, hinged, non-clogging, mushroom dome strainer. Hinged dome is easily cleaned; removable if necessary.

Open Area Ratio of Dome Orifices to Outlet

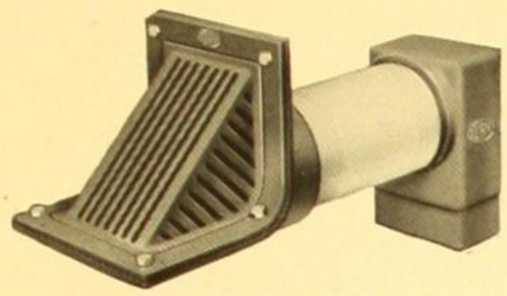
2″—35:1 3″—16:1 4″—9:1 5″—6:1 6″—4:1



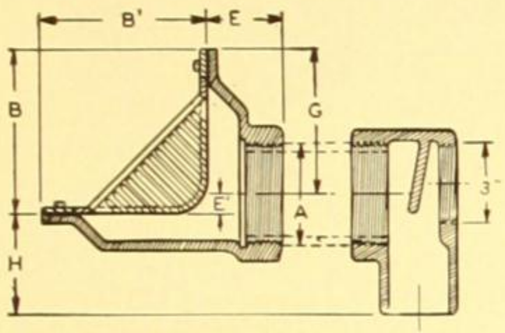
Z-118 I.P.S. Outlet

Furnished With or Without Anchorage Lugs

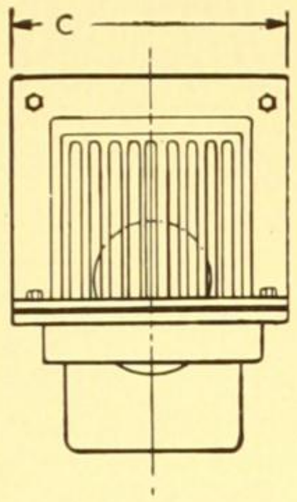
PARAPET SCUPPER ROOF DRAIN — FIG. Z-119
With Downspout Adaptor For Sheet Metal Connection



Z-119



45° Oblique Type Strainer



I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	With Bronze Strainer Coated (CB)	Galv. (GB)	All Bronze (BR)
2-3-4″	$29.10	$50.30	$40.90	$61.10	$97.20
4-5-6″	37.00	60.20	55.00	78.60	104.70

Price does not include Downspout Adapter or Nipple.
Add for Downspout Adapter.

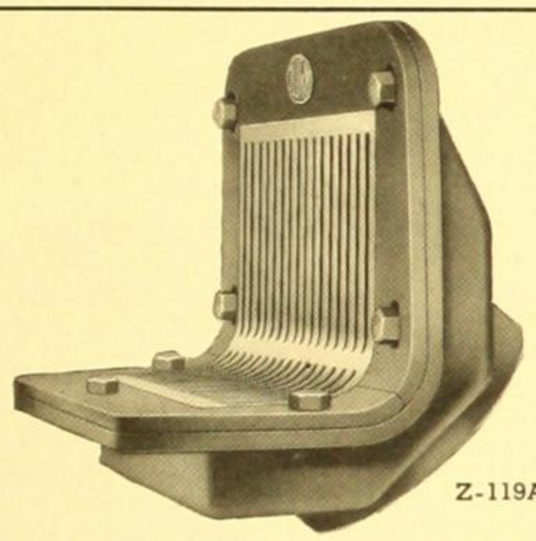
2-3-4″	11.30	19.80			43.20
4-5-6″	14.30	24.30			50.30

Pipe Size A	B	B'	C	E	E'	G	H	Approx. Wt. Lbs.
2″	6¼″	6¼″	7½″	2¾″	−⅜″	6⅝″	7″	20
3″	6¼″	6¼″	7½″	2¾″	+⅛″	6⅛″	5 13/16″	20
4″	6¼″	6¼″	7½″	2¾″	+⅝″	5⅝″	4 5/16″	20
4″	8½″	8½″	12¾″	3⅝″	+⅛″	8⅜″	7¾″	52
5″	8½″	8½″	12¾″	3⅝″	+½″	8″	6 27/32″	52
6″	8½″	8½″	12¾″	3⅝″	+1⅛″	7⅜″	5 11/16″	52

Sheet metal size for 2″, 3″ and 4″ drain—3″ x 5″
Sheet metal size for 4″, 5″ and 6″ drain—4″ x 6″

Wall thickness determines nipple length. Provides wall outlet roof drainage to exterior downspout conductors. 90° angle type strainer available—see Z-119A below.

PARAPET SCUPPER ROOF DRAIN With 45° Outlet — FIG. Z-119A

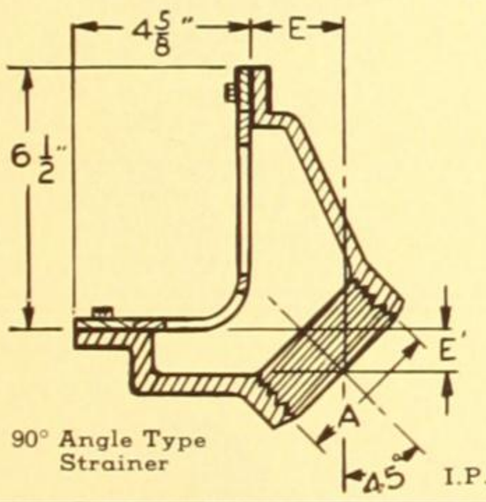


Z-119A

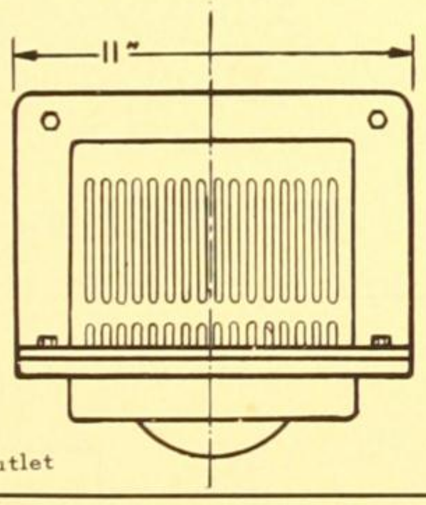
Pipe Size A	Coated (DC)	Galv. (G)	With Bronze Strainer Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	$29.10	$50.30	$40.90	$61.10	$ 97.20	20
4-5-6″	37.00	60.20	55.00	78.60	104.70	52

Price does not include Downspout Adapter or Nipple.

Pipe Size A	E	E'
2″	1″	1⅞″
3″	1½″	1¾″
4″	1¾″	1½″
4-5-6″	On request.	



90° Angle Type Strainer

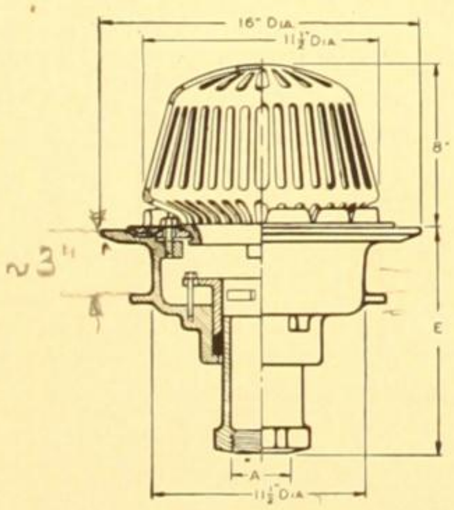


I.P.S. Outlet

Wall thickness determines nipple length. Provides wall outlet roof drainage to exterior downspout conductors. 45° oblique type strainer available; 90° angle type regularly furnished.

ROOF DRAIN — FIG. Z-120
With Internal Expansion Joint; High Velocity Drainage

Z-120



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

Pipe Size A	E Min.	E Max.	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	8¼″	10¼″	$36.00	$ 56.60	$118.60	55
3″	8¼″	10¼″	39.00	61.10	125.80	57
4″	8¼″	10¼″	42.00	65.60	130.60	60
5″	8¼″	10¼″	50.30	78.30	160.30	63
6″	8¼″	10¼″	56.30	89.10	191.00	65
8″	8¼″	10¼″	79.50	124.50	262.10	75

Caulk outlet available.

Integral expansion joint provides adjustable installation and insures flexible expansion on leader lines to compensate for structural or temperature variation. Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2″—35:1	4″—9:1	6″—4:1
3″—16:1	5″—6:1	8″—2:1

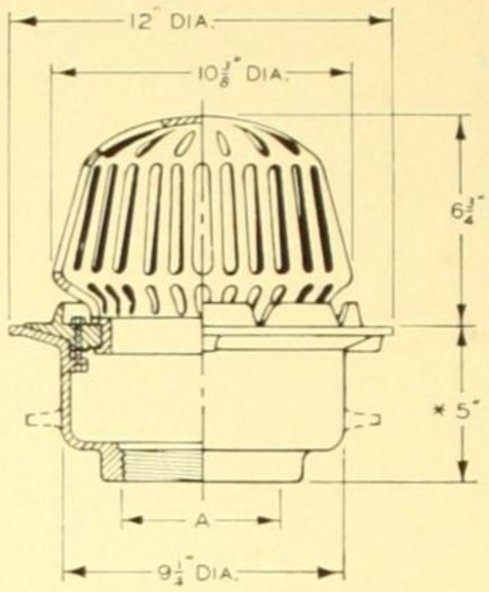
Specify Bye Sleeve

FIG. Z-121 ROOF DRAIN

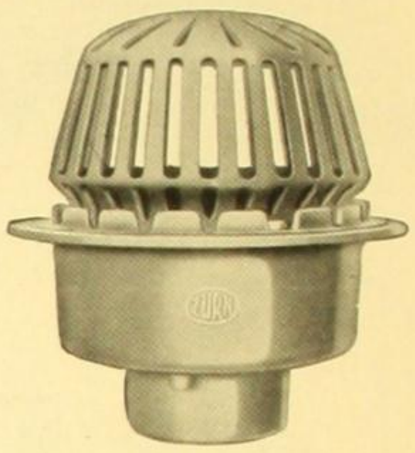
Pipe Size A	E	Coated (DC)	Galv. (G)	With Bronze Strainer Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	5″	$18.80	$29.70	$27.00	$38.80	$ 64.00	22
5″	5″	22.10	33.80	31.50	44.20	74.60	23
6″	5″	25.10	37.40	39.00	56.50	104.00	24

Caulk outlet available; "E" dimension approximately 1½″ longer.

For medium and small roof areas.



I.P.S. Outlet



Z-121

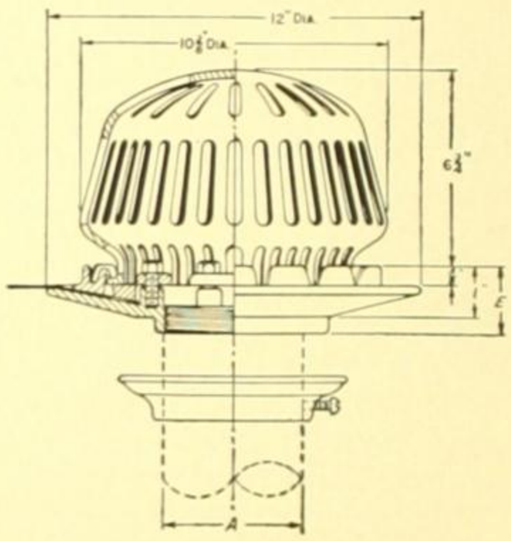
Furnished With or Without Anchorage Lugs

FIG. Z-122 ROOF DRAIN With Anchorage Collar For Steel Deck

Pipe Size A	E	Coated (DC)	Galv. (G)	With Bronze Strainer Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	1½″	$16.50	$27.00	$24.80	$36.10	$57.60	21

Caulk outlet available; outlet approximately 1½″ longer.

For prefabricated steel roof decks. Outlet will clear vertical webs on 6″ centers. Eliminates cutting of large holes through decking and webs with resultant weakening of roof.



I.P.S. Outlet

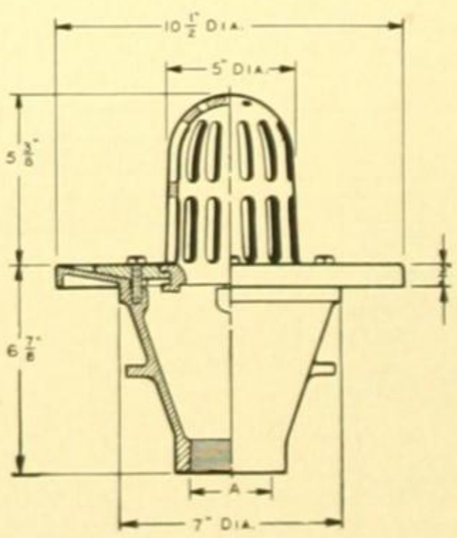
Z-122

FIG. Z-124 ROOF DRAIN, Summer-Winter Type

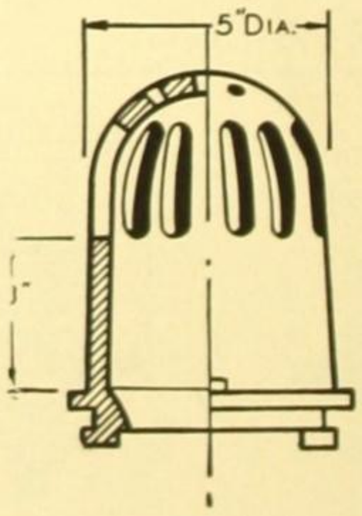
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	$18.00	$28.80	$53.80	20
Add for water level dome combination	6.00	9.00	14.40	

Caulk outlet available; outlet approximately 1½″ longer.

Provides efficient residential drainage with regular dome strainer—use of water level dome provides economical heat resistant facility.



I.P.S. Outlet

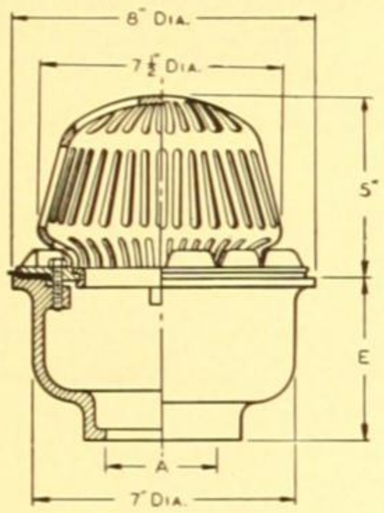


Water Tight Interchangeable Dome for Water Level on Roof

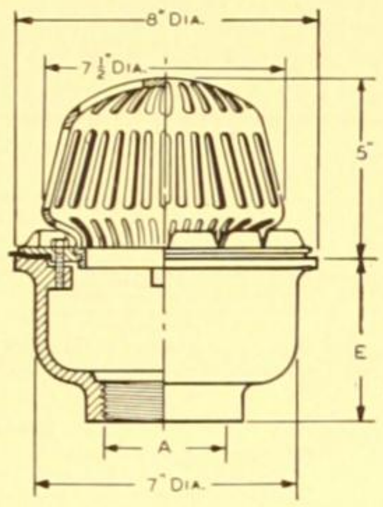
Z-124

Furnished With or Without Anchorage Lugs

Z-125



Caulk Outlet



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

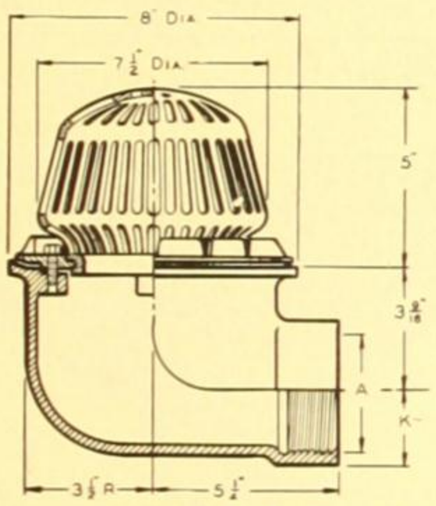
ROOF OR GUTTER DRAIN — FIG. Z-125

Pipe Size A	E (I.P.S.)	E (I.C.)	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	4 1/16"	5 5/8"	$13.50	$19.80	$36.00	17
5"	4 3/16"	5 5/8"	15.00	21.60	40.00	18

For narrow valleys and gutters, decks and other small roof areas. Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2"— 11:1 4"—3:1
3"— 5:1 5"—2:1



Z-135 I.P.S. Outlet

ROOF OR GUTTER DRAIN With Side Outlet — FIG. Z-135

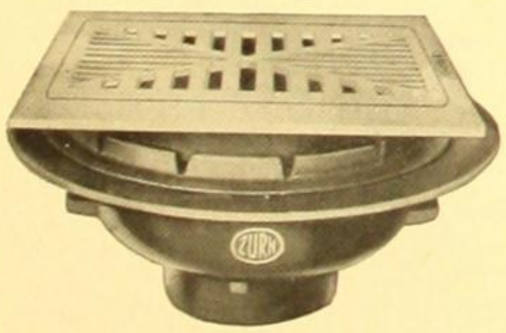
Pipe Size A	K	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	1 7/16"	$18.00	$25.20	$48.00	31
3"	2"	18.00	25.20	48.00	32
4"	2 9/16"	18.00	25.20	48.00	33
5"		20.30	27.90	54.00	38

Caulk outlet available.

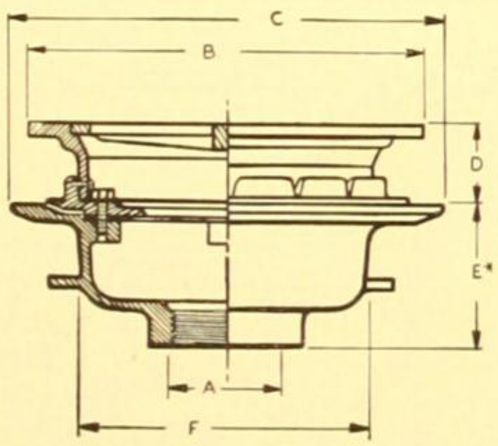
For decks, parapets and other small roof areas. Extra large removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2"—11:1 3"—5:1 4"—3:1 5"—2:1



Z-150



I.P.S. Outlet

For flat roof or promenade deck areas.

Furnished With or Without Anchorage Lugs

ROOF OR PROMENADE DECK DRAIN — FIG. Z-150

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	W/Bronze Frame and Strainer Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	$30.00	$49.80	$109.40	$52.20	$ 72.20	57
5"	36.80	58.70	117.10	58.50	82.10	58
6"	40.50	66.00	140.20	68.30	96.30	59
8"	54.00	84.60	159.40	82.50	116.10	60

Add to (CB) or (GB) Lists for

Pipe Size	C. P.	W. M.
2-3-4"	$11.20	$14.40
5"	12.00	16.00
6-8"	12.80	17.60

Caulk outlet available; "E" dimension approximately 1½" longer.

Pipe Size A	B	C	D	E	F
2-3-4"	14x14"	16"	2"	5¼"	11½"
5"	14x14"	16"	2"	5¼"	11½"
6"	14x14"	16"	2"	5¼"	11½"
8"	14x14"	16"	2"	5½"	11½"

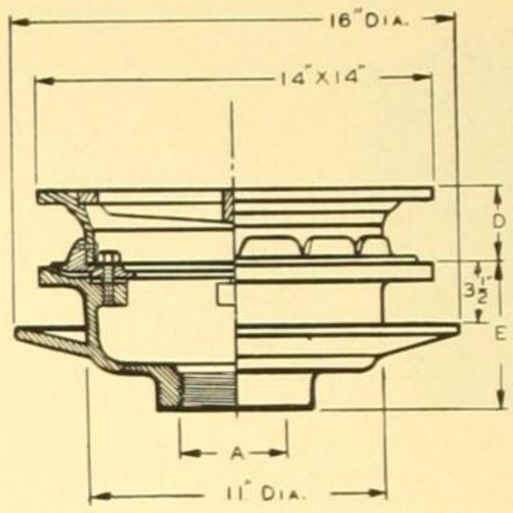
FIG. Z-150A ROOF OR DECK DRAIN

Pipe Size A	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	Galv. (GB)
2-3-4″	2″	5¼″	$42.00	$69.60	$154.20	$64.20	$ 92.00
5″	2″	5¼″	48.80	78.50	161.90	70.50	101.90
6″	2″	5¼″	52.50	85.80	185.00	80.30	116.10
8″	2″	5¼″	66.00	104.40	204.20	94.50	135.90

Add to (CB) or (GB) Lists for

Pipe Size	C. P.	W. M.
2-3-4″	$11.20	$14.40
5″	12.00	16.00
6-8″	12.80	17.60

Caulk outlet available; "E" dimension approximately 1½″ longer.
Approx. Wt. Lbs. 2″-3″-4″—60, 5″—61, 6″—62, 8″—63.



I.P.S. Outlet

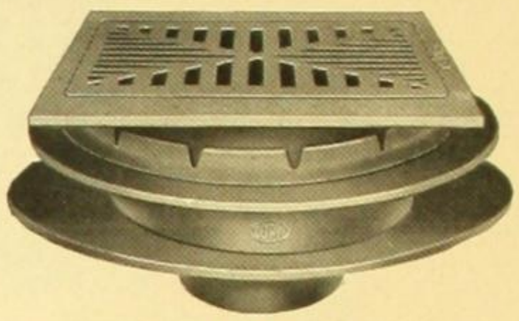
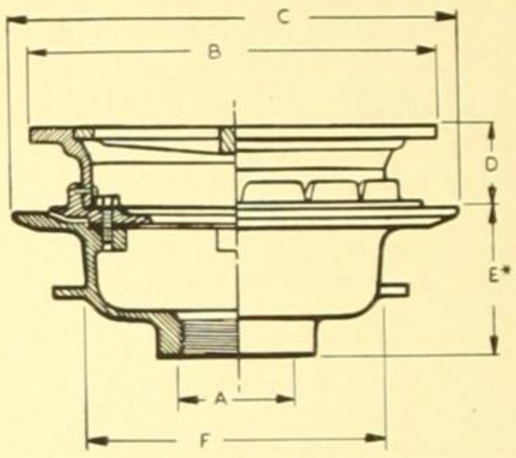

Z-150A

FIG. Z-151 ROOF OR PROMENADE DECK DRAIN

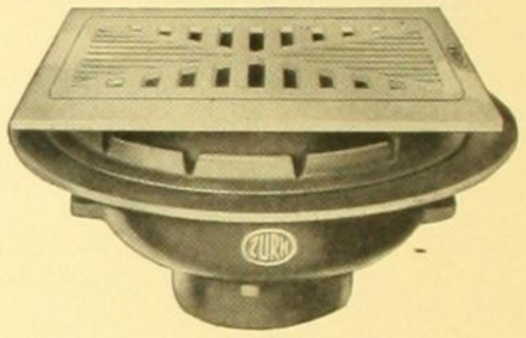
Pipe Size A	Coated (DC)	Galv. (G)	W/Bronze Frame and Strainer Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4″	$24.00	$38.60	$39.90	$54.60	$ 76.00
5″	28.10	43.70	44.70	69.50	83.40
6″	34.40	54.90	56.50	82.80	104.90

Pipe Size A	B	C	D	E	F	Approx. Wt. Lbs.
2-3-4″	11x11″	12″	2″	5″	9¼″	34
5″	11x11″	12″	2″	4¾″	9¼″	35
6″	11x11″	12″	2″	5″	9¼″	36

Caulk outlet available; "E" dimension approximately 1½″ longer.



I.P.S. Outlet


Z-151

Furnished With or Without Anchorage Lugs

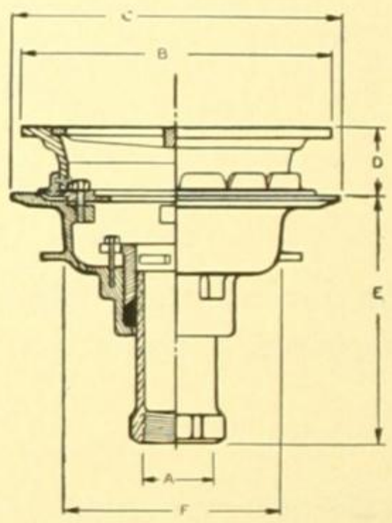
FIG. Z-152 ROOF OR PROMENADE DECK DRAIN

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2″	$42.00	$66.00	$135.80	$64.20	$ 88.40	59
3″	45.00	70.70	136.60	67.20	92.90	60
4″	48.00	75.00	141.40	70.20	97.40	61
5″	57.80	87.80	169.90	79.50	111.80	62
6″	64.50	100.20	202.60	92.30	130.50	63

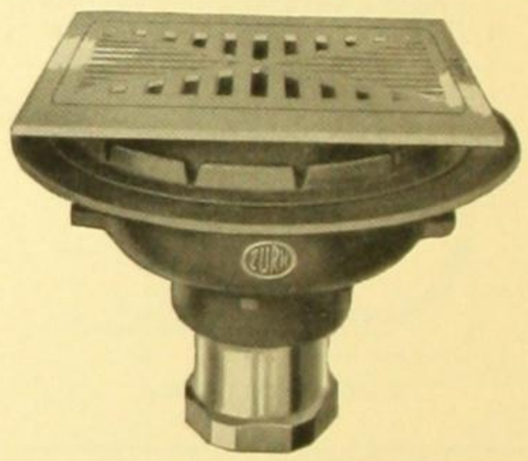
Pipe Size A	B	C	D	E	F
2″	14x14″	16″	2″	8¼″—10¼″	11½″
3″	14x14″	16″	2″	8¼″—10¼″	11½″
4″	14x14″	16″	2″	8¼″—10¼″	11½″
5″	14x14″	16″	2″	8¼″—10¼″	11½″
6″	14x14″	16″	2″	8¼″—10¼″	11½″

Caulk outlet available.

For any type roof construction or composition requiring expansion provision in minimum space.



I.P.S. Outlet


Z-152

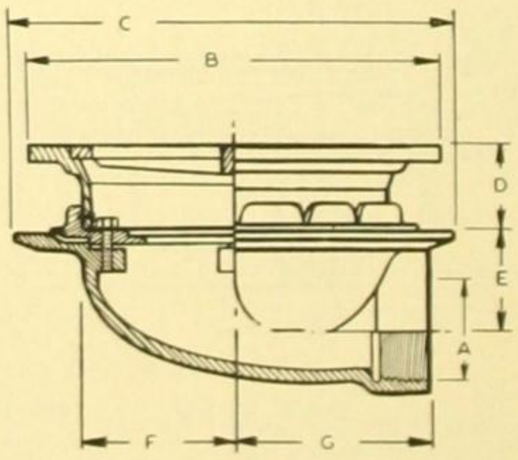
Furnished With or Without Anchorage Lugs

FIG. Z-155 ROOF OR PROMENADE DECK DRAIN With Side Outlet

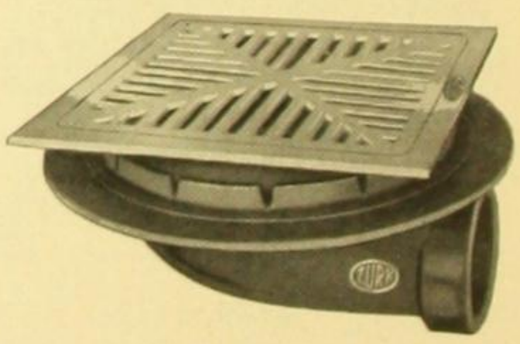
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2″	$37.50	$62.40	$144.60	$59.70	$ 85.60	72
3″	37.50	62.40	144.60	59.70	85.60	73
4″	37.50	62.40	144.60	59.70	85.60	74
5″	46.50	75.80	158.10	68.20	99.00	75
6″	50.40	85.60	193.80	79.20	158.30	76

Pipe Size A	B	C	D	E	F	G
2″	14x14″	16″	2″	6¾″	5⅝″	7¼″
3″	14x14″	16″	2″	6″	5⅝″	7¼″
4″	14x14″	16″	2″	5⅝″	5⅝″	7¼″
5″	14x14″	16″	2″	5¼″	5⅝″	7¼″
6″	14x14″	16″	2″	4½″	5⅝″	7¼″

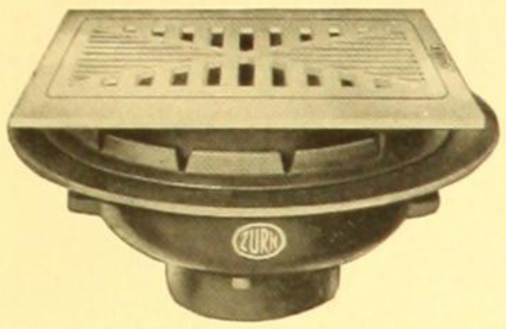
Caulk outlet available.



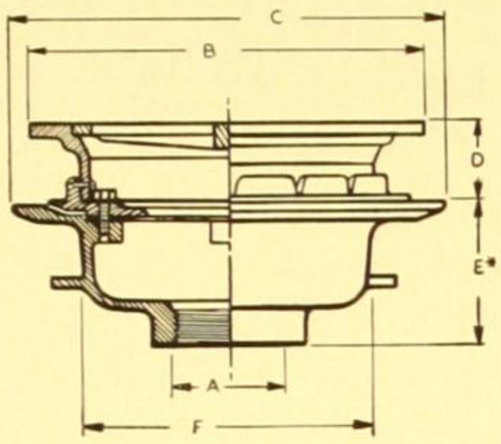
I.P.S. Outlet


Z-155

ROOF OR PROMENADE DECK DRAIN FIG. Z-165



Z-165



I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2-3-4″	$18.00	$27.00	$45.60	$27.80	$37.20	16
5″	19.50	28.80	49.60	29.60	39.30	17

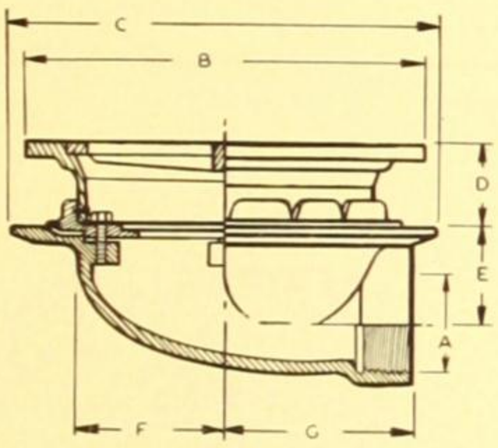
Pipe Size A	B	C	D	E*	F
2″	8x8″	8″	1¾″	4 1/16″	7″
3″	8x8″	8″	1¾″	4 1/16″	7″
4″	8x8″	8″	1¾″	4 1/16″	7″
5″	8x8″	8″	1¾″	4 3/16″	7″

Caulk outlet available; "E" dimension approximately 1½″ longer.

For small flat roof areas.

Furnished With or Without Anchorage Lugs

ROOF OR PROMENADE DECK DRAIN With Side Outlet FIG. Z-170



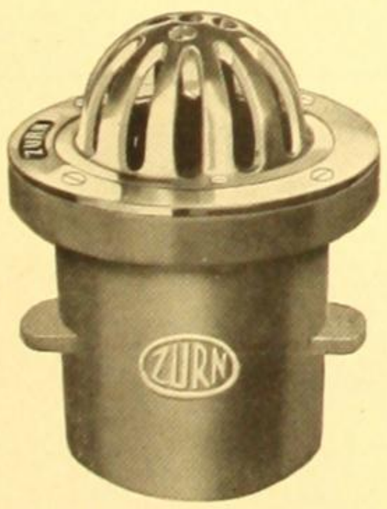
Z-170—I.P.S. Outlet

Pipe Size A	B	C	D	E	F	G	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Bronze Frame and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2″	8″	8″	1¾″	3 9/16″	3½″	5¼″	$22.50	$32.40	$57.60	$32.30	$42.60	26
3″	8″	8″	1¾″	3 9/16″	3½″	5¼″	22.50	32.40	57.60	32.30	42.60	27
4″	8″	8″	1¾″	3 9/16″	3½″	5¼″	22.50	32.40	57.60	32.30	42.60	28
5″	8″	8″	1¾″	3 9/16″	3½″	5¼″	27.00	39.60	69.60	31.50	43.20	32

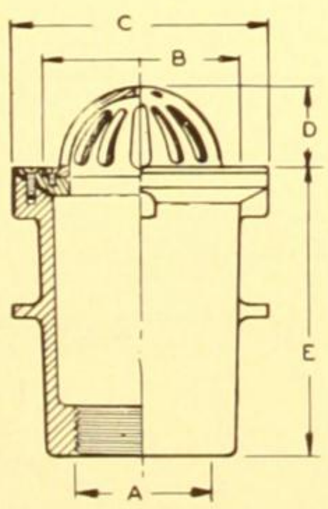
Caulk outlet available.

For small flat roof areas requiring side outlet.

PARAPET OR CORNICE DRAIN With Dome Strainer, FIG. Z-180



Z-180



I.P.S. Outlet

Pipe Size A	B	C	D	E	W/Bronze Collar and Strainer Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	3⅜″	4½″	1⅝″	8″	$14.90	$20.70	$24.50	10
3″	3⅜″	4½″	1⅝″	8″	16.60	22.80	27.20	14
2″	3⅜″	4½″	1⅜″	4″	10.00	13.70	17.50	8
3″	3⅜″	4½″	1⅝″	4″	11.80	15.80	20.20	12
2″	3⅜″	4½″	1⅝″	2″	7.60	10.20	13.20	4
3″	3⅜″	4½″	1⅝″	2″	9.30	12.30	14.90	6

Pipe Size	Add for C. P.	W. M.
2-3″	$2.80	$3.50

Caulk Outlet and flat strainer types available.
Specify "E" dimension when ordering.

A practical drain for close quarters and out-of-the-way locations.

Furnished With or Without Anchorage Lugs

FIGS. Z-185 & Z-186 CORNICE OR BALCONY DRAIN

With Dome Strainer

Pipe Size A	W/Bronze Collar and Strainer Coated (DC)	Galv. (G)	All Bronze (BR)
2″	$10.50	$13.30	$14.00
3″	14.00	18.90	22.75
4″	17.50	25.20	28.00

Pipe Size	Add for C. P.	W. M.
2″	$2.80	$3.50
3″	4.10	6.20
4″	4.10	6.20

Z-185

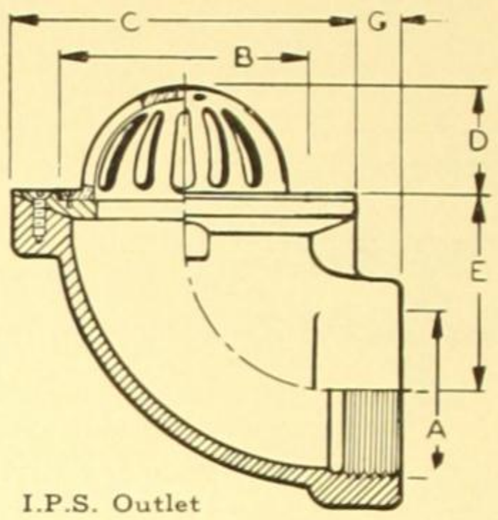
Pipe Size A	B	C	D	E	F	Approx. Wt. Lbs.
2″	3 3/8″	4 1/2″	1 5/8″	2 1/2″	1/2″	5
3″	4 3/4″	6 1/16″	2″	3″	1/2″	7
4″	4 3/4″	6 1/16″	2″	3″	5/8″	10

Z-186

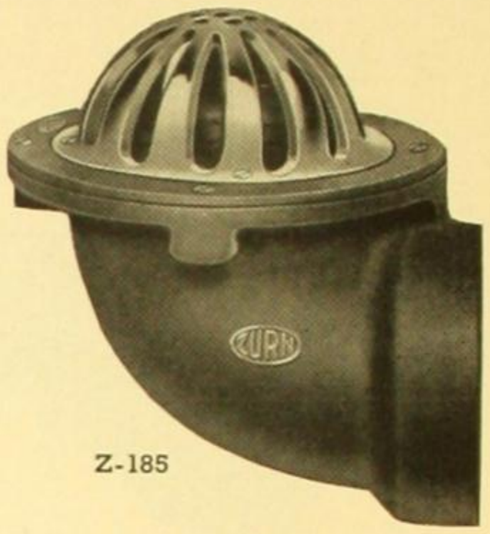
Pipe Size A	B	C	D	E*	Approx. Wt. Lbs.
2″	3 3/8″	4 1/2″	1 5/8″	4″	5
3″	4 3/4″	6 1/16″	2″	5 1/16″	7
4″	4 3/4″	6 1/16″	2″	5 3/8″	10

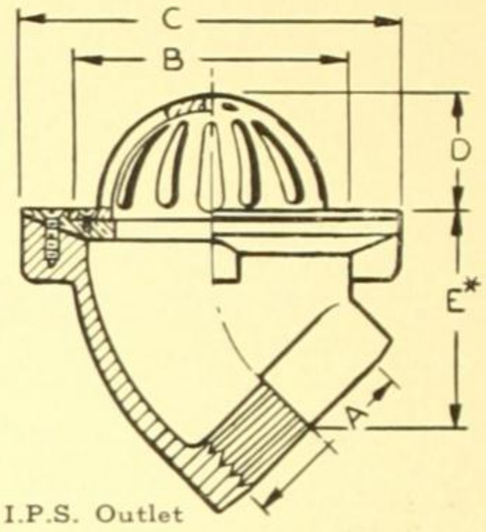
Caulk outlet and flat strainer types available

For drainage control on small roof areas.



I.P.S. Outlet


Z-185



I.P.S. Outlet

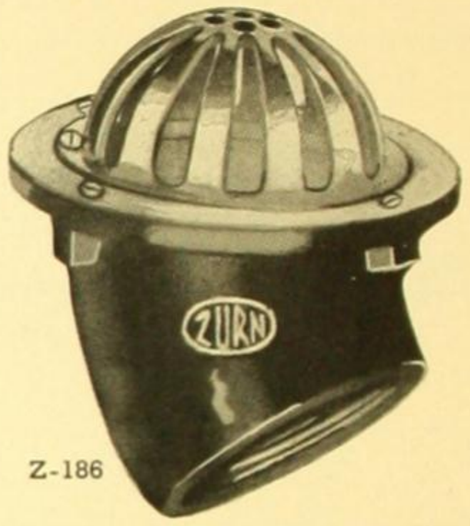

Z-186

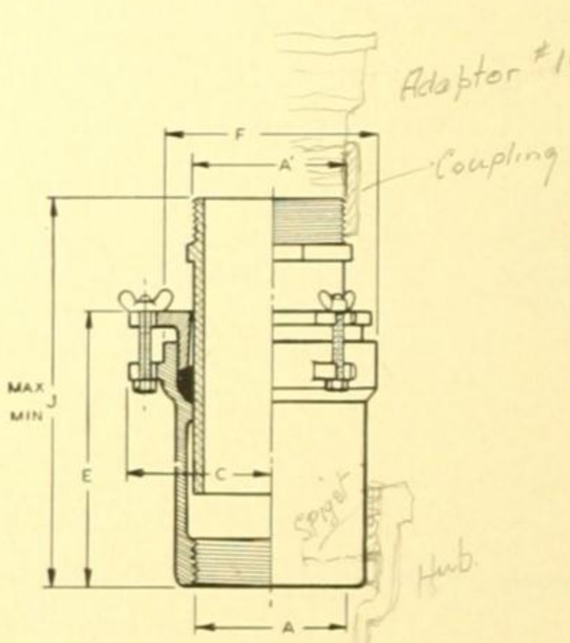
FIG. Z-190 EXPANSION JOINT

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	$12.00	$16.20	$ 26.40	7
3″	15.00	20.70	33.60	10
4″	18.00	25.20	38.40	14
5″	21.00	29.70	52.80	17
6″	24.00	34.20	62.40	21
8″	34.50	50.40	100.80	32

Pipe Size A	A′	C	E	F	J Min.	J Max.
2″	2″	2 11/16″	6″	3 5/8″	7 3/4″	10 3/4″
3″	3″	3 1/4″	6″	4 5/8″	7 3/4″	10 3/4″
4″	4″	3 3/4″	5 3/4″	5 1/2″	7 1/2″	10 1/2″
5″	5″	4 1/4″	6″	6 1/2″	7 7/8″	10 7/8″
6″	6″	5″	6″	7 7/8″	7 7/8″	10 7/8″
8″	8″	5 15/16″	6″	9 7/8″	7 7/8″	10 7/8″

Caulk outlet available

Provides for roof or drainage pipe expansion and contraction due to precipitation loads and temperature changes.



I.P.S. Outlet

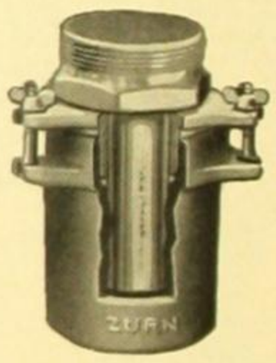
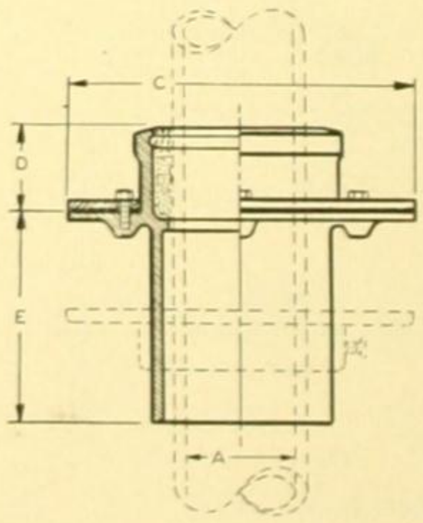
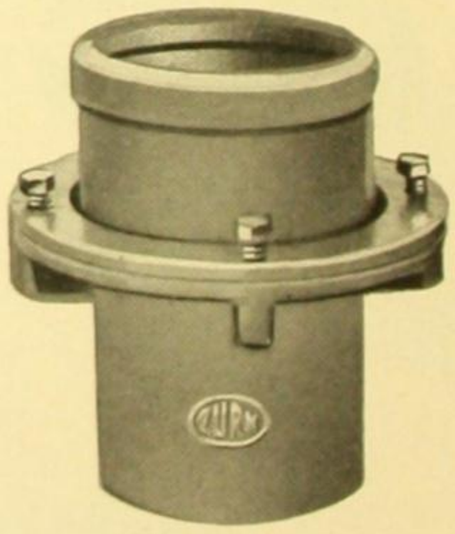

Z-190

FIG. Z-195 VENT STACK FLASHING SLEEVE

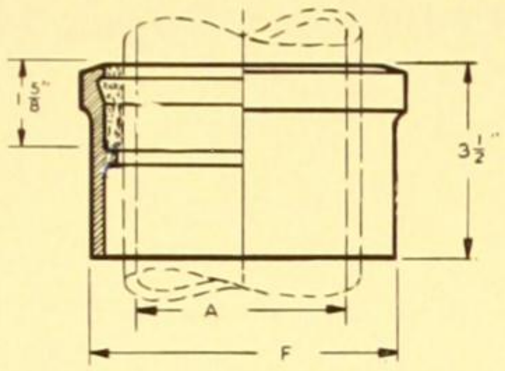
Pipe Size A	C	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2-2″	6 1/2″	3″	5″	$ 8.40	$ 12.60	$ 20.40	13
2 1/2-3″	7 1/2″	3 1/8″	5″	9.60	15.40	28.80	14
4″	8 1/2″	3 1/16″	5″	13.20	20.80	36.00	15
5″	11 1/2″	2 1/2″	6″	16.40	26.20	48.00	22
6″	10 1/2″	3 1/8″	5″	17.80	28.20	52.00	24
8″	14 1/2″	2 7/8″	6″	24.00	37.20	62.00	27
10″	16 9/16″	2 3/4″	6″	48.00	76.80	116.00	36
12″	18 1/2″	2 3/4″	6″	72.00	108.00	160.00	45
Add for bottom	1 1/2-3″			2.00	3.60	5.00	
roof clamping	4-6″			4.00	6.00	7.00	
flange	8-12″			5.00	8.40	10.00	

Assures leak-proof vent piping through roof; positive clamping collar.




Z-195

Z-196

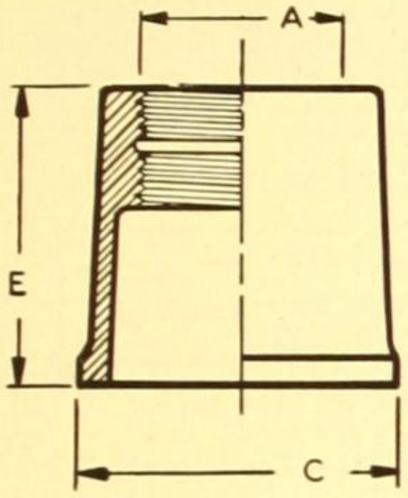


VENT STACK FLASHING SLEEVE (COUNTER FLASHING) FIG. Z-196

Pipe Size A	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	2 15/16"	$1.10	$1.70	$3.20	2
2"	3½"	1.40	2.20	4.30	2½
3"	4 11/16"	2.20	3.40	6.60	3½
4"	5 9/16"	3.20	5.00	9.80	4½
5"	6 11/16"	4.70	7.20	14.00	6
6"	7 11/16"	6.20	9.60	18.90	7½

For Soil or Steel Pipe

Provides tight connection by caulking.

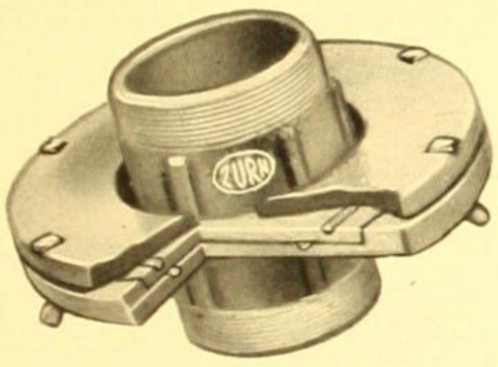


Z-196-3

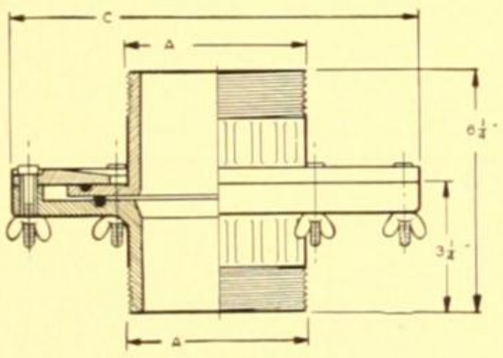
VENT FLASHING FITTING FIG. Z-196-3

Pipe Size A	C	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
1½"	2¾"	3⅝"	$2.00	$ 3.60	2
2"	3¾"	3⅞"	2.40	4.30	3
3"	4¾"	4⅛"	3.00	5.80	4
4"	5⅞"	3 15/16"	4.20	6.70	6
5"	7"	4"	5.60	9.10	8
6"	8"	4½"	7.60	13.90	10
8"	10⅞"	5 3/16"	12.00	20.40	21

Double thread connections.



Z-197



HORIZONTAL EXPANSION JOINT FIG. Z-197

Pipe Size A	C	Max. Offset	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2"	8 3/16"	½"	$ 32.00	$ 46.00	35
3"	9 5/16"	½"	36.50	52.00	38
4"	10 5/16"	½"	42.00	61.00	41
6"	12½"	½"	67.00	92.00	45
8"	14½"	½"	108.00	139.00	50
10"	16½"	½"	144.00	192.00	59

Provides for horizontal expansion and for offset connections.

ROOF DRAIN PARTS

FIGS. Z-100 TO Z-115 DOMES

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	$ 9.00	$13.50	$21.60
5"	9.80	14.60	23.20
6"	10.50	15.90	26.40
8"	17.30	26.70	52.80

Add for Polish Bronze Domes	$ 9.60

FIGS. Z-125 TO Z-135 DOMES

2-3-4-5"	$ 4.50	$ 6.90	$12.00	$ 6.40

FIGS. Z-150 TO Z-155 FLAT STRAINERS

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	$ 4.50	$ 7.20	$ 9.60
5"	5.30	8.10	10.40
6"	6.00	9.90	12.80
8"	6.80	10.80	15.30

FIGS. Z-165 TO Z-170

2-3-4-5"	$ 4.30	$ 6.50	$10.00

FIGS. Z-105 STRAINER RINGS

	Coated	Galv.	All Bronze
All Sizes	$ 1.80	$ 2.70	$ 4.00

BRASS CLAMPING BOLTS . . . . . $ .70

FIGS. Z-100 TO Z-115 AND Z-150 TO Z-155 CLAMPING COLLARS

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	$ 4.50	$ 7.20	$ 9.60
5"	5.00	7.90	10.60
6"	5.40	8.60	12.50
8"	6.80	10.80	14.40

FIGS. Z-125 TO Z-135 AND Z-165 TO Z-170 CLAMPING COLLARS

2-3-4-5"	$ 1.50	$ 2.30	$ 4.00

For polished bronze clamping collars add 50%

FIGS. Z-105 AND Z-150 TO Z-155 TILE FRAMES

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	$ 9.00	$12.60	$24.00
5"	10.50	15.70	25.90
6"	11.30	16.70	27.20
8"	18.00	24.80	38.40

FIGS. Z-130 AND Z-165 TO Z-170

2-3-4-5"	$ 6.30	$ 7.90	$10.40

FIGS. Z-130 STRAINER RINGS

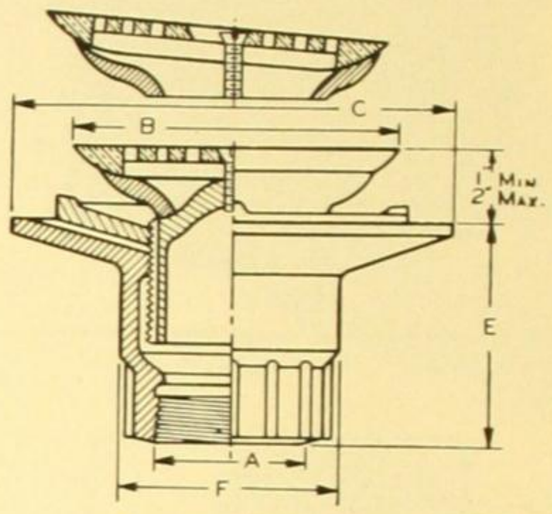
All Sizes	$ 1.40	$ 2.20	$ 3.20

FLOOR OR SHOWER DRAINS . . . Pages 14 to 22

FIGS. Z-200 AND Z-210 FLOOR OR SHOWER DRAIN

Pipe Size A	B-Dia.	C	E Caulk	E I.P.S.	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2″	4″	7″	3¾″	3½″	3¾″	$11.30	$16.20	$22.40	$1.60	12
2″	5″**	7″	3¾″	3½″	3¾″	12.80	18.00	24.00	2.10	13
3″	5″	9″	4″	3⅝″	4¾″	15.00	21.60	28.00	2.10	15
3″	6″**	9″	4″	3⅝″	4¾″	17.30	24.30	30.40	2.60	16
3″	7″	9″	4″	3⅝″	4¾″	21.00	28.80	34.40	3.70	17
4″	5″	9″	4″	3⅝″	5⅝″	16.50	24.30	30.40	2.10	16
4″	6″	9″	4″	3⅝″	5⅝″	18.80	27.00	32.80	2.60	17
4″	7″**	9″	4″	3⅝″	5⅝″	22.50	31.50	36.80	3.70	18
Deduct for clamp collar						1.50	2.70	4.00		

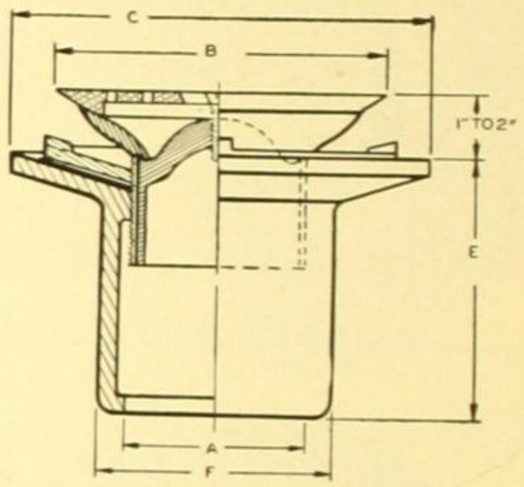
**Recommended sizes



Z-200—I. P. S. Outlet

Strainer adjustable to plane of floor assuring smooth finish. Non-clogging seepage slots in flashing collar and in vertically adjustable head.

Z-200

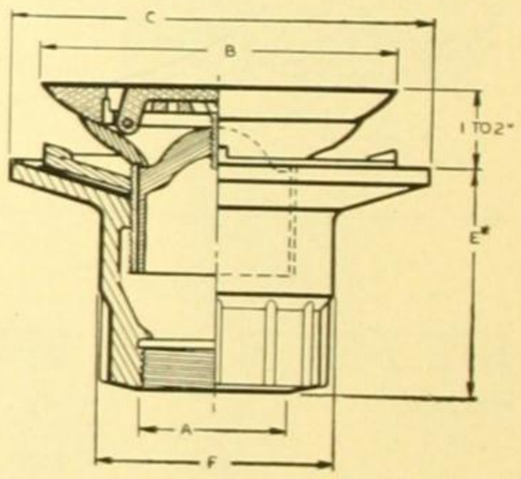


Z-210—Caulk Outlet

FIG. Z-220 FLOOR DRAIN With Solid Hinged Cover

Pipe Size A	B-Dia.	C	E*	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
1½-2″	5″	7″	3½″	3¾″	$18.80	$25.20	$30.40	$2.10	12
3″	5″	9″	3⅝″	4¾″	21.00	28.80	34.40	2.10	14
3″	7″	9″	3⅝″	4¾″	30.00	39.60	44.00	3.70	16
4″	7″	9″	3⅝″	5⅝″	31.50	42.30	46.40	3.70	17
Deduct for clamp collar					1.50	2.70	4.00		

Caulk outlet available; "E" dimension approximately 1½″ longer.



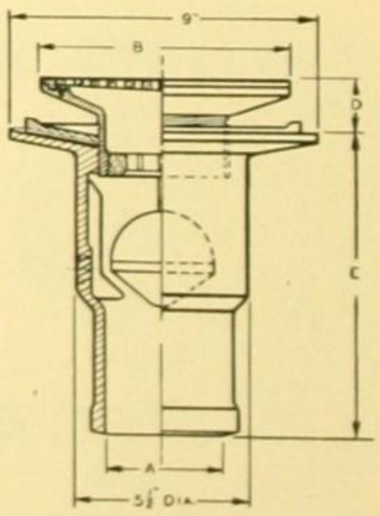
Z-220—I.P.S. Outlet

Strainer provided with solid hinged cover to be used when strainer is not in operation. Provides finished appearance in exposed locations.

FIG. Z-230 FLOOR DRAIN With Automatic Back Pressure Device

Pipe Size A	B-Dia.	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	W/Pol. Bronze Strainer Coated (DC)	Galv. (G)	Chrome Str. add	Approx. Wt. Lbs.
2″	5″	⅝″—1⅜″	7⅛″	$16.50	$26.10	$44.80	$26.30	$36.00	$ 2.10	24
3″	6″	1″ —2″	8⅛″	18.00	27.90	48.80	27.80	37.80	2.60	25
4″	7″	1″ —2″	8⅛″	19.50	29.70	52.80	29.30	39.60	3.70	26
Deduct for clamping collar				1.50	2.70	4.00				
Grate only				2.60	4.50	6.40				
Secondary Strainer				1.50	2.70	3.20				
Primer Tapping				2.50	2.50	2.50				

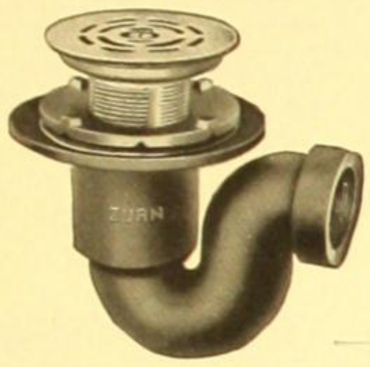
I. P. S. outlet available.



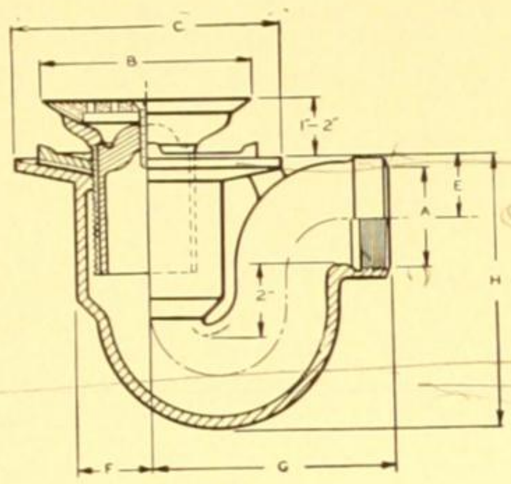
Z-230—Caulk Outlet

For control of backwater from other fixtures or street sewers. Strainer head adjustable to finished floor level.

FLOOR OR SHOWER DRAIN With Integral Trap FIG. Z-250



Z-250



I.P.S. Outlet

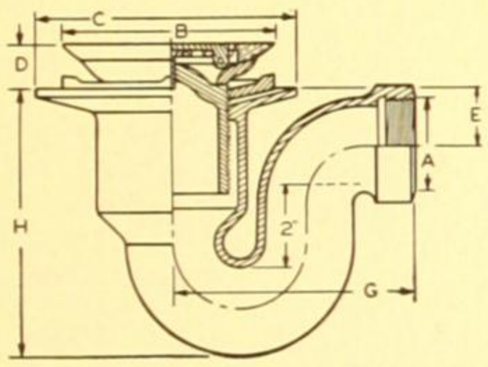
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
1½-2"	$19.50	$29.70	$51.20	$1.60	16
1½-2"	21.00	31.50	52.80	2.10	17
3"	27.00	40.50	69.90	2.10	24
3"	29.30	43.20	72.30	2.60	25
3"	33.00	47.70	76.30	3.70	26
4"	33.80	52.20	94.90	2.10	31
4"	36.00	54.90	97.30	2.60	32
4"	39.80	59.40	101.30	3.70	33
Deduct for clamp collar	1.50	2.70	4.00		

Pipe Size A	B-Dia.	C	E	F	G	H
1½-2"	4"	7"	1½"	1¾"	6⅛"	6¾"
1½-2"	5"**	7"	1½"	1¾"	6⅛"	6¾"
3"	5"	9"	2⅛"	2 5/16"	8⅛"	9"
3"	6"**	9"	2⅛"	2 5/16"	8⅛"	9"
3"	7"	9"	2⅛"	2 5/16"	8⅛"	9"
4"	5"	9"	2¾"	2 5/16"	8"	9"
4"	6"	9"	2¾"	2 5/16"	8"	9"
4"	7"**	9"	2¾"	2 5/16"	8"	9"

**Recommended sizes
Caulk outlet available.

Strainer adjustable to plane of floor—see Fig. Z-200—assuring smooth finish. Non-clogging seepage slots in flashing collar and in vertically adjustable head.

FLOOR DRAIN With Solid Hinged Cover and Integral Trap FIG. Z-265



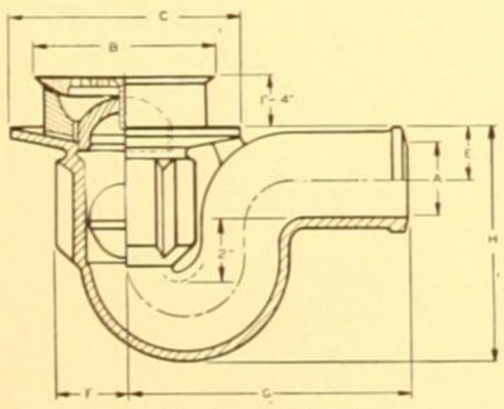
Z-265—I.P.S. Outlet

Pipe Size A	B-Dia.	C	D	E	G	H	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
1½-2"	5"	7"	1"—2"	1½"	6⅛"	6¾"	$27.00	$38.70	$59.20	$2.10	17
3"	5"	9"	1"—2"	2⅛"	8⅛"	9"	33.00	47.70	75.30	2.10	25
3"	7"	9"	1"—2"	2⅛"	8⅛"	9"	42.00	58.50	85.90	3.70	27
4"	7"	9"	1"—2"	2¾"	8"	9"	48.80	70.20	110.90	3.70	33
Deduct for clamp collar							1.50	2.70	4.00		

Caulk outlet available.

Strainer provided with solid hinged cover to be used when strainer is not in operation. Provides finished appearance in exposed locations.

FLOOR DRAIN With Automatic Back Pressure Device and Integral Trap FIG. Z-270



Z-270—Caulk Outlet

Pipe Size A	B-Dia.	C	E	F	G	H	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2"	3"	7"	1½"	1 13/16"	9"	6¾"	$27.00	$37.80	$56.80	$2.10	14
3"	5"	9"	2⅛"	2⅝"	11"	9"	33.00	46.80	72.90	2.10	21
3"	7"	9"	2⅛"	2⅝"	11"	9"	39.00	54.00	80.30	3.70	23
4"	7"	9"	2¾"	2⅝"	11"	9"	45.80	66.60	107.70	3.70	30

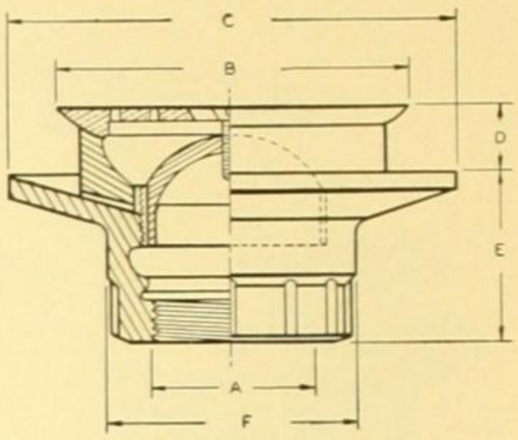
Deduct for less back pressure device 2-3"—$4.80 4"—$6.40
I. P. S. outlet available.

For control of backwater from other fixtures or street sewers. Strainer adjustable to plane of floor—see Fig. Z-200.

FIG. Z-280 FLOOR DRAIN

Pipe Size A	B-Dia.	C	D	E	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	5"	7"	1"—4"	2½"	3¾"	$ 9.80	$13.20	$16.30	8
3"	5"	9"	1"—4"	2¾"	4¾"	11.60	16.20	20.40	15
3"	7"	9"	1"—4"	2¾"	4¾"	17.60	23.40	26.10	16
4"	7"	9"	1"—4"	2¾"	5⅝"	18.80	25.60	28.20	17
Str. rest 3" high add						1.50	2.20	2.90	
Str. rest 4" high add						2.10	2.90	3.50	

Strainer adjustable to plane of floor—see Fig. Z-200.



Z-280—I.P.S. Outlet

FIG. Z-300 "THOROFLUSH" FLOOR DRAIN With Side Outlet

Pipe Size A	B-Dia.	E	Pol. Bronze Grate Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. Add	W. M. Add	Approx. Wt. Lbs.
2-3"	11"	2½"	$66.00	$93.50	$142.40	$11.20	$14.40	50
2-3"	12"x12"	2½"	83.00	116.30	176.40	12.80	19.20	52
Clamp collar, deduct			6.00	9.00	12.80			

Removable plug or stopper in strainer add **$7.20**
Caulk outlet available.

Water pressure flushing provides for sanitary washing of drain interior. Recommended for hospitals.

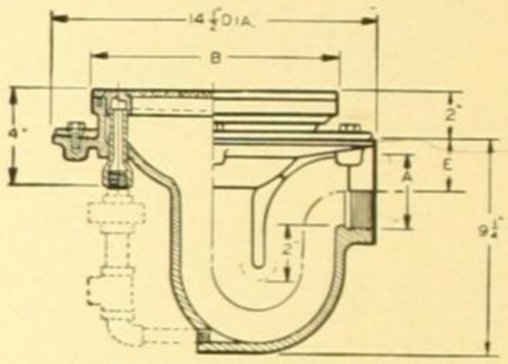

Z-300—I.P.S. Outlet

FIG. Z-310 "THOROFLUSH" FLOOR DRAIN WITH POL. BRONZE HINGED GRATE

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. Add	W. M. Add	Approx. Wt. Lbs.
2-3"	$54.00	$75.30	$111.70	$11.20	$14.40	18
2-3"	65.80	95.30	133.60	12.80	19.20	20
Clamp collar, deduct	6.00	9.00	12.80			

Removable plug or stopper in strainer add **$7.20**

Pipe Size A	B-Dia.
2-3"	11"
2-3"	12"x12"

Caulk outlet available; outlet dimension approximately 1½" longer.

Water pressure flushing provides for sanitary washing of drain interior. Recommended for hospitals.

Z-310—I.P.S. Outlet

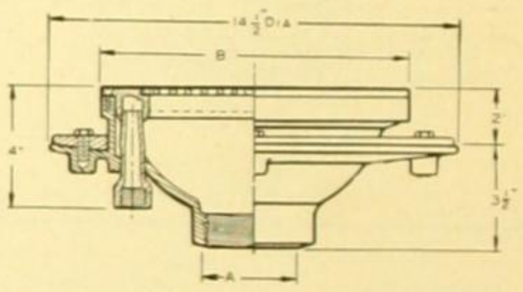
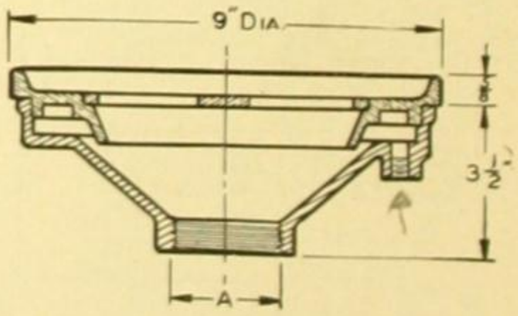


FIG. Z-320 REFRIGERATOR FLOOR DRAIN With Flushing Connection

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1-2"	$18.80	$25.70	$38.40	15

Chrome plated rim and strainer add **$4.80**
White metal rim and strainer add **$9.60**

Flushing connection guards against contamination from melted ice water residues.

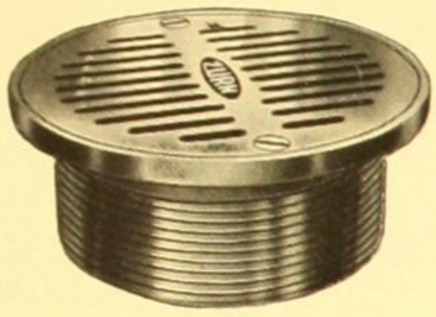


Z-320—I.P.S. Outlet

STRAINER HEADS FOR FLOOR OR SHOWER DRAINS

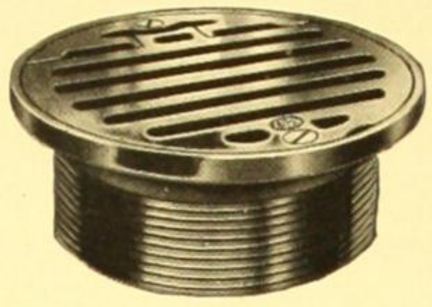
INTERCHANGEABLE

ALL I.P.S. STANDARD THREADS

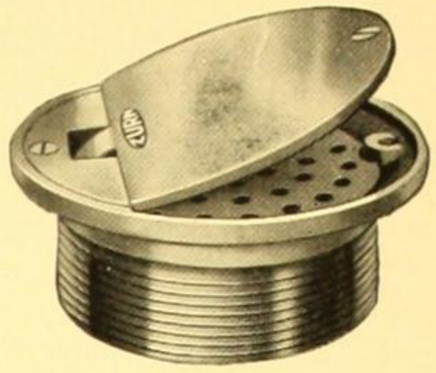


Standard Round—Slotted
Type "A"

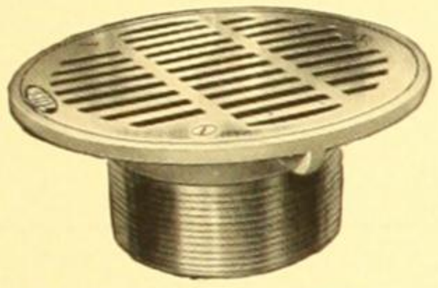
Standard Round—Square Perforations
Type "B"



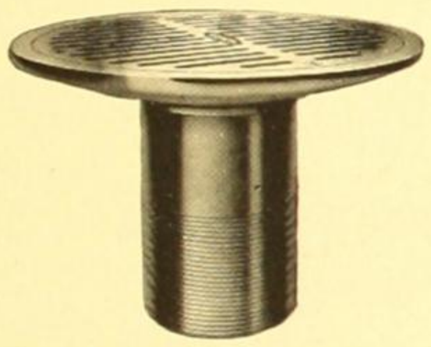
Standard Round—with Hinged Strainer, Full Slotted
Type "C"



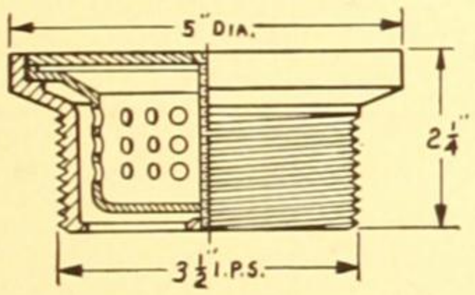
Standard Round—with Solid Top Hinged with Recessed Strainer
Type "D"



Standard Round—with Anchoring Lugs and Slotted Strainer
Type "E"



Standard Round—with Adjustable Sleeve and Slotted Strainer
Type "F"



Round—Basket Strainer
Type "M"

STRAINER HEADS For Floor or Shower Drains

Types "A" "B" and "F" (2" Length) Standard Round

E7

Tall Piece

Top Diam.	I.P.S. Th'd Size	Pol. Bronze	C. P. Add	W. M. Add	Approx. Wt. Lbs.
4"	2"	$ 4.80	$ 1.60	$ 2.40	1
4½"	2"	5.60	1.80	2.80	1½
5"	3½"	6.40	2.10	3.20	2
6"	3½"	8.80	2.60	4.40	3
7"	3½"	12.80	3.70	6.40	4½
8"	3½-5"	14.40	4.80	7.20	5
10"	3½-5"	20.80	8.00	10.40	11
12"	3½-5"	28.80	11.20	14.40	17

Type "H"—Standard Square

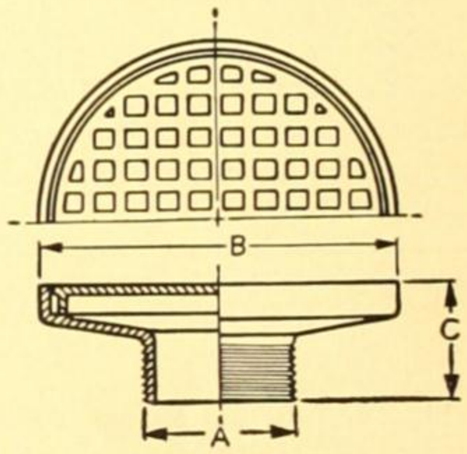
Top Dim.	I.P.S. Th'd Size	Pol. Bronze	C. P. Add	W. M. Add	Approx. Wt. Lbs.
4"	2"	$ 6.00	$ 2.00	$ 3.00	2
4½"	2"	6.90	2.30	3.40	2½
5"	3½"	8.00	2.60	4.00	3
6"	3½"	11.00	3.20	5.60	4½
7"	3½"	16.00	4.60	8.00	5
8"	3½"	18.00	6.00	9.00	6
10"	3½"	26.00	10.00	13.00	12
12"	3½"	36.00	14.00	18.00	18

Standard Square—Slotted
Type "H"

Standard Square—with Anchoring Lugs and Slotted Strainer
Type "I"

TYPES "K" and "L" ANGLE SHOWER STRAINER, 90° Male or Female, I.P.S.

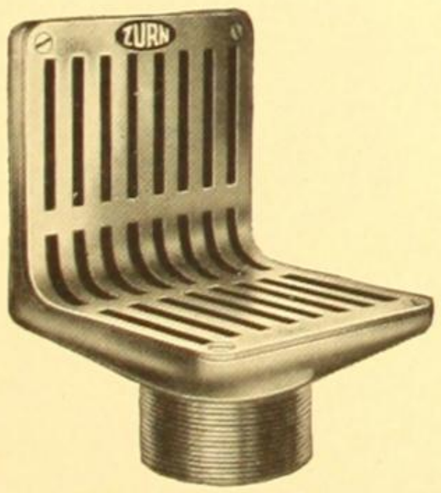
Strainer Size	Pipe Size A	Pol. Bronze Top	C. P. Top	W. M. Top	Approx. Wt. Lbs.
3½x3½x4½"—C. I. Body	3½"	$10.40	$15.20	$17.60	8
6½x6½x7" —C. I. Body	3½"	20.80	30.40	35.20	15
3½x3½x4½"—Bronze Body	3½"	14.40	19.20	21.60	9
6½x6½x7" —Bronze Body	3½"	28.80	38.40	43.20	6



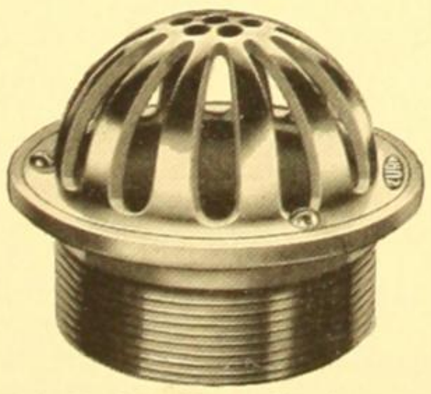
Type "N"

TYPE "G"—DOME OR BEEHIVE

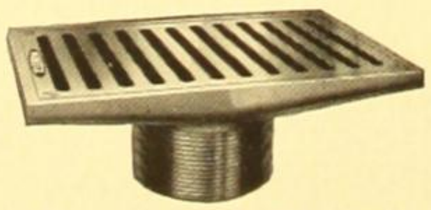
Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4"	$ 6.40	$ 8.60	$ 9.60	1½
4½"	7.40	9.80	11.30	2
5"	8.60	11.30	12.90	2½
6"	11.80	15.10	17.60	3½



90° Male I.P.S.
Type "K"



Beehive Dome Strainer
Type "G"



Rectangular—Full Slotted
Type "J"

90° Female I.P.S.
Type "L"

Continued on Following Page

TYPE "C"—HINGED TOP

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4"	$ 8.00	$ 9.60	$10.40	1
4½"	8.80	10.60	11.60	1½
5"	9.60	11.70	12.80	2
6"	12.00	14.60	16.40	3
7"	16.00	19.80	22.40	4½
8"	17.60	22.40	24.80	5

TYPE "D"—SOLID HINGED TOP With Secondary Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
5"	$12.80	$15.90	$17.60	3
6"	16.40	20.20	23.00	4
7"	22.40	28.20	32.00	5½
8"	24.80	32.00	35.60	6

TYPE "J"—RECTANGULAR

Size Top	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4½x8"	$18.40	$21.60	$27.60	4
5x9"	20.00	23.20	30.00	5
5x17"	27.20	35.20	40.80	13½

TYPE "M"—ROUND With Basket Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
5"	$10.70	$13.20	$16.10	4

TYPE "N"—ROUND With Tractor Type Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
7"	$16.60	$20.50	$25.10	8
9"	25.00	31.40	37.40	12

Type "I"—Add 30% to Type "H" prices—see page 17.
Type "E"—Add 30% to Type "A" prices—see page 17.
Drains or parts of Everdur Metal, Monel Metal, Malleable Iron or Cast Steel—Prices on Application.
Concave or Convex Strainer, add 25%.
Hinged Strainer Square, add to Type "C" $4.80.
Adjustable Sleeves longer than 2"—see Type "F", prices on application.
Bronze Extension Pieces, prices on application.
All Standard Strainer Heads have a maximum adjustment on threaded shank of 1¼"-1½" depending on drain size.

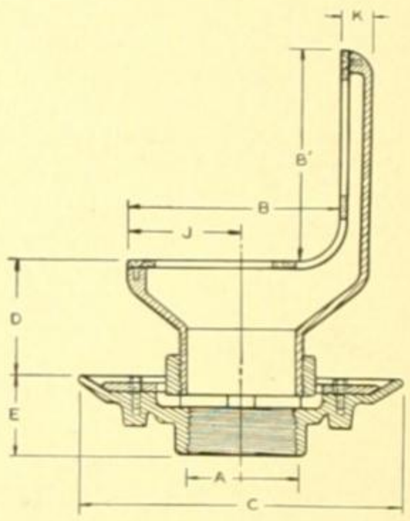
FIG. Z-400 SHOWER DRAIN With Angle Strainer

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	$20.80	$26.00	$32.00	10
1½-2"	35.20	40.40	46.40	24
3"	22.60	31.40	36.00	11
3"	37.00	45.80	50.40	25
4"	38.40	47.70	52.80	26
Deduct for clamp collar	1.50	2.70	4.00	

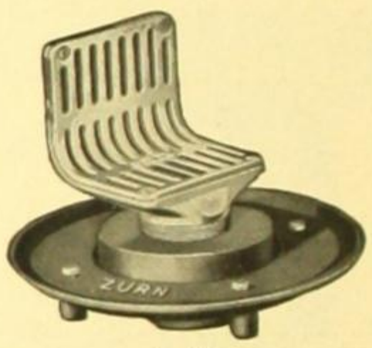
Pipe Size A	B	B'	C	D Min.	D Max.	E	J	K
1½-2"	3½"	3½"	7⅞"	1½"	2½"	1¾"	1"	¾"
1½-2"	6½"	6½"	9½"	3"	4"	2⅛"	3½"	1"
3"	3½"	3½"	7⅞"	1½"	2½"	1¾"	1"	¾"
3"	6½"	6½"	9½"	3"	4"	2⅜"	3½"	1"
4"	6½"	6½"	9½"	3"	4"	2⅜"	3½"	1"

Caulk outlet available; "E" dimension approximately 1½" longer.

Floor and wall drainage. Prevents flooding due to paper or towels on strainer. Strainer adjustable to finished floor.



I.P.S. Outlet



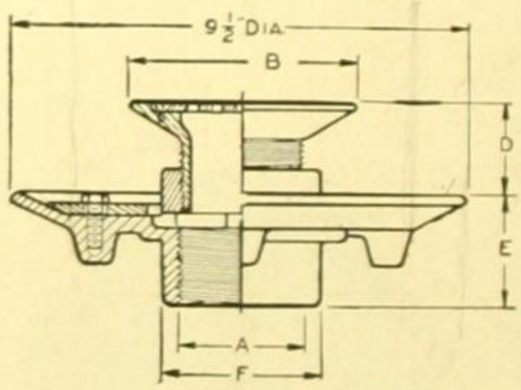
Z-400

FIG. Z-405 FLOOR OR SHOWER DRAIN

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. Add	Approx. Wt. Lbs.
1½-2"	$11.30	$16.20	$22.40	$1.60	10
1½-2"	12.80	18.00	24.00	2.10	11
3"	14.60	23.40	28.00	2.10	11
3"	17.00	25.80	30.40	2.60	12
3"	21.00	29.80	34.40	3.70	13
4"	18.40	27.70	32.80	2.60	12
4"	22.40	31.70	36.80	3.70	13
4"	24.00	33.30	38.40	4.80	14
5"	28.70	36.00	43.40	4.80	16
6"	31.20	40.00	48.40	4.80	17
Deduct for clamp collar	1.50	2.70	4.00		

Pipe Size A	B-Dia.	D Min.—Max.	E	F
1½-2"	4"	1" —2"	2⅛"	2¾"
1½-2"	5"**	1¼"—2¼"	2⅛"	2¾"
3"	5"	1¼"—2¼"	2⅜"	4"
3"	6"**	1¼"—2¼"	2⅜"	4"
3"	7"	1⅞"—3"	2⅜"	4"
4"	6"	1¼"—2¼"	2⅜"	5"
4"	7"	1¼"—2¼"	2⅜"	5"
4"	8"**	1½"—3"	2⅜"	5"
5"	8"	1½"—3"	2⅜"	6¼"
6"	8"	1½"—3"	2⅜"	7¼"

**Recommended sizes

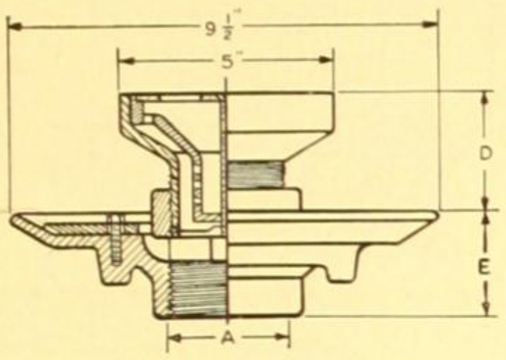


I.P.S. Outlet

Z-405

Provides positive seepage control. Strainer adjustable to floor level.

FLOOR OR SHOWER DRAIN, Adjustable Head, Basket Strainer Type — FIG. Z-405-5



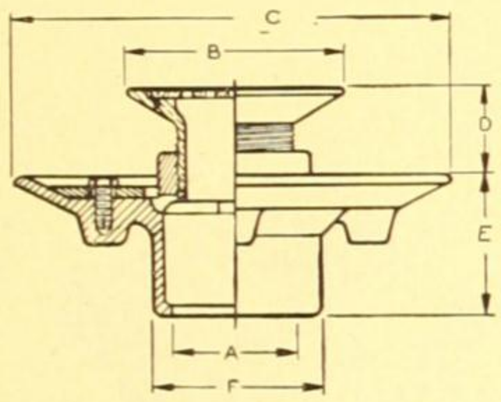
Z-405-5—I.P.S. Outlet

Pipe Size A	D Min.—Max.	E	Diam. Str.	Cast Iron W/Pol. Str. Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	W. M.	Approx. Wt. Lbs.
1½-2"	1¼"—2½"	2⅛"	5"	$17.10	$22.30	$28.30	$2.50	$5.40	13
3"	1¼"—2½"	2⅜"	5"	18.90	27.70	32.30	2.50	5.40	14
4"	1¼"—2½"	2⅜"	5"	20.30	29.60	34.70	2.50	5.40	15
Deduct for clamping collar				1.50	2.70	4.00			

Caulk outlet available; "E" dimension approximately 1½" longer.

Removable interior basket strainer keeps lines clean.

FLOOR OR SHOWER DRAIN — FIG. Z-415



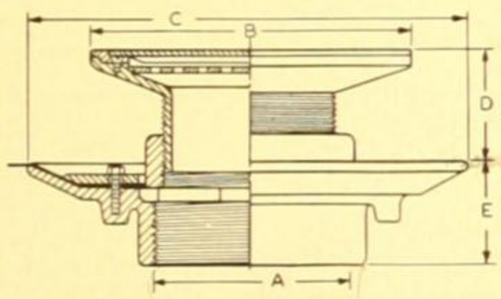
Z-415—Caulk Outlet

Pipe Size A	B-Dia.	C	D Min.—Max.	E	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2"	4"	9½"	1" —2"	3⅜"	3½"	$11.30	$16.20	$22.40	$1.60	11
2"	5"**	9½"	1¼"—2¼"	3⅜"	3½"	12.80	18.00	24.00	2.10	12
3"	5"	9½"	1¼"—2¼"	3⅝"	4⅝"	14.60	23.40	28.00	2.10	12
3"	6"**	9½"	1¼"—2¼"	3⅝"	4⅝"	17.00	25.80	30.40	2.60	13
3"	7"	9½"	1½"—3"	3⅝"	4⅝"	21.00	29.80	34.40	3.70	14
4"	6"	10"	1¼"—2¼"	3⅝"	5¾"	18.40	27.70	32.80	2.60	14
4"	7"	10"	1¼"—2¼"	3⅝"	5¾"	22.40	31.70	36.80	3.70	15
4"	8"**	10"	1½"—3"	3⅝"	5¾"	24.00	33.30	38.40	4.80	16
Deduct for clamp collar						1.50	2.70	4.00		

**Recommended sizes

Provides positive seepage control. Strainer adjustable to floor level.

FLOOR DRAIN With Solid Hinged Cover — FIG. Z-420



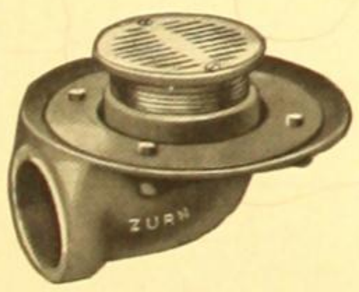
Z-420—I.P.S. Outlet

Pipe Size A	B-Dia.	C	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Top add	Approx. Wt. Lbs.
1½-2"	5"	9½"	1¼"—2¼"	2⅛"	$19.20	$24.40	$30.40	$3.10	12
3"	5"	9½"	1¼"—3"	2⅜"	21.00	29.80	34.40	3.10	13
3"	7"	9½"	1½"—3"	2⅜"	30.60	39.40	44.00	5.80	16
4"	7"	9½"	1½"—3"	2⅜"	32.00	41.30	46.40	5.80	17
Deduct for clamp collar					1.50	2.70	4.00		

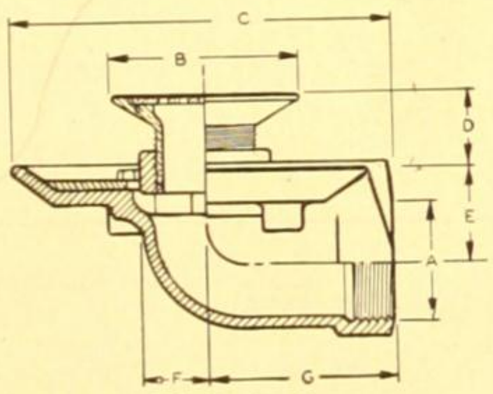
Caulk outlet available; "E" dimension approximately 1½" longer.

Strainer provided with solid hinged cover to be used when strainer is not in operation.

FLOOR DRAIN With Side Outlet — FIG. Z-430



Z-430



I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	Approx. Wt. Lbs.
1½-2"	$13.60	$19.80	$27.20	$1.60	12
1½-2"	15.10	21.60	28.80	2.10	13
3"	17.60	27.90	36.00	2.10	14
3"	20.00	30.30	38.40	2.60	15
3"	24.00	34.30	42.40	3.70	16
Deduct for clamp collar	1.50	2.70	4.00		

Pipe Size A	B-Dia.	C	D Min.—Max.	E	F	G
1½-2"	4"	7½"	1½"—2¼"	2¼"	1⅜"	3⅞"
1½-2"	5"**	7½"	1½"—2¼"	2¼"	1⅜"	3⅞"
3"	5"	9½"	1½"—2¼"	3⅛"	2¼"	4⅞"
3"	6"**	9½"	1½"—2¼"	3⅛"	2¼"	4⅞"
3"	7"	9½"	1½"—3"	3⅛"	2¼"	4⅞"

**Recommended sizes

Caulk spigot outlet available.

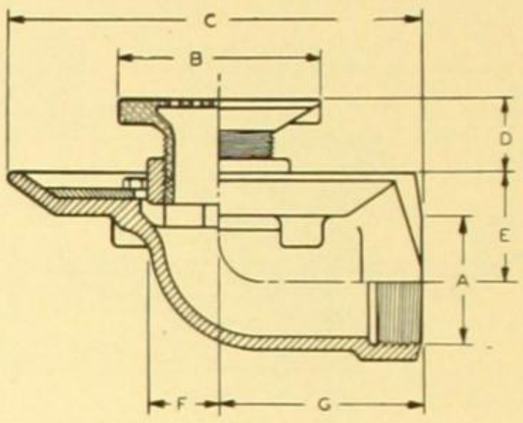
Side outlet for shallow floor space. Provides positive seepage control. Strainer adjustable to floor level.

FIG. Z-440 PRISON CELL DRAIN

Pipe Size A	B-Dia.	C	D Min.—Max.	E	F	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	Approx. Wt. Lbs.
1½-2"	4"	7½"	1½"—2¼"	2¼"	1⅜"	3⅞"	$16.60	$22.80	$30.20	$1.60	12
1½-2"	5"**	7½"	1½"—2¼"	2¼"	1⅜"	3⅞"	18.90	25.40	32.60	2.10	13
3"	5"	9½"	1½"—2¼"	3⅛"	2¼"	4⅞"	21.40	31.70	39.80	2.10	14
3"	6"**	9½"	1½"—2¼"	3⅛"	2¼"	4⅞"	25.20	35.50	43.60	2.60	15
3"	7"	9½"	1½"—3"	3⅛"	2¼"	4⅞"	32.30	42.60	50.70	3.70	16
Deduct for clamp collar							1.50	2.70	4.00		

**Recommended sizes
Caulk outlet available.

Strainer provided with anchorage lugs. Top strainer integrally cast to strainer head to prevent its removal.



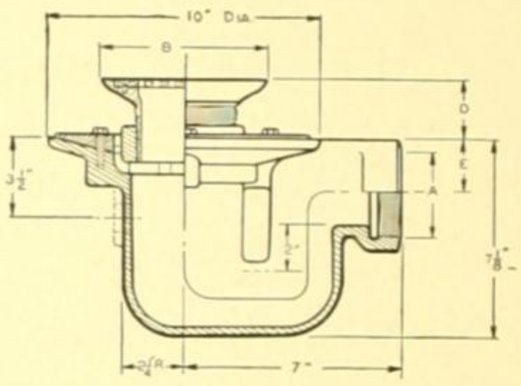
Z-440—I.P.S. Outlet

FIG. Z-450 FLOOR OR SHOWER DRAIN With Integral Trap (Drum Type)

Pipe Size A	B-Dia.	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)
1½-2"	4"	1¼"—2¼"	2½"	$19.50	$29.70	$51.20
1½-2"	5"**	1¼"—2¼"	2½"	21.00	31.50	52.80
3"	5"	1¼"—2¼"	2"	26.60	41.30	69.90
3"	6"**	1¼"—2¼"	2"	29.00	43.70	72.30
3"	7"	1½"—3"	2"	33.00	47.70	76.30
4"	6"	1¼"—2¼"	2½"	35.70	55.60	97.30
4"	7"	1¼"—2¼"	2½"	39.70	59.60	101.30
4"	8"**	1½"—3"	2½"	41.30	61.20	102.90
Deduct for clamp collar				1.50	2.70	4.00

Approx. Wt. Lbs. 1½"-2"—17, 18, 3"—30, 31, 32, 4"—31, 32, 33.
**Recommended sizes
Caulk outlet available.

Provides positive seepage control. Strainer adjustable to floor level.



I.P.S. Outlet

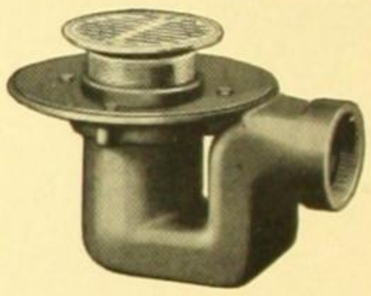
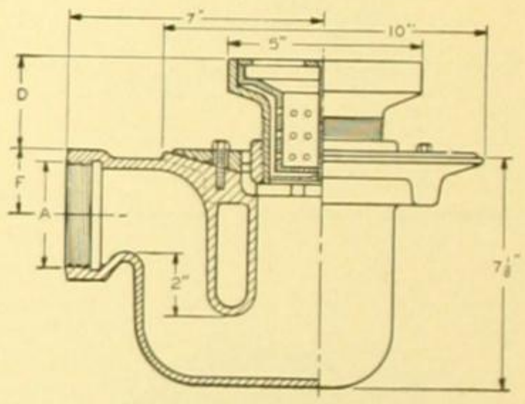

Z-450

FIG. Z-450-5 FLOOR OR SHOWER DRAIN With Integral Trap (Drum Type), Adjustable Head, Basket Strainer Type

Pipe Size A	D Min.—Max.	Diam. Strainer	F	Cast Iron with Polished Strainer Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	1¼"—2½"	5"	2½"	$25.30	$35.80	$57.10	32
3"	1¼"—2½"	5"	2"	30.90	45.60	74.20	33
4"	1¼"—2½"	5"	2½"	37.60	57.50	99.20	34
Deduct for clamp collar				1.50	2.70	4.00	

Add for Chrome Plate Top $2.50
Add for White Metal Top 5.40
Caulk outlet available.

Removable interior basket strainer keeps lines clean.



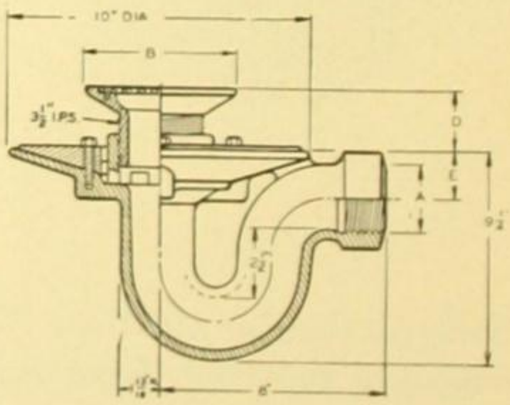
Z-450-5—I.P.S. Outlet

FIG. Z-453 FLOOR OR SHOWER DRAIN With Integral Trap (Uniform Diameter Type)

Pipe Size A	B-Dia.	D Min.—Max.	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	W. M.	Approx. Wt. Lbs.
1½-2"	5"	1¼"—2 1/16"	2½"	$21.00	$31.50	$52.80	$2.10	$3.20	30
3"	6"	1¼"—2¾"	2½"	29.00	43.70	72.30	2.60	4.40	31
4"	7"	1½"—3"	3¼"	39.70	59.60	101.30	3.70	6.40	32
Deduct for clamp collar				1.50	2.70	4.00			

Caulk outlet available.

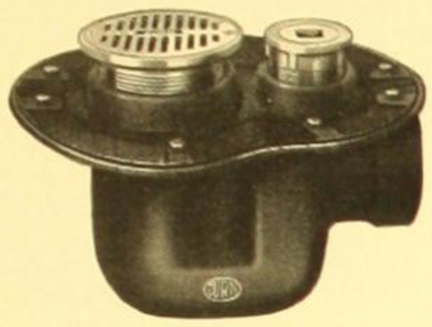
Provided with positive clamping collar and adjustable head.



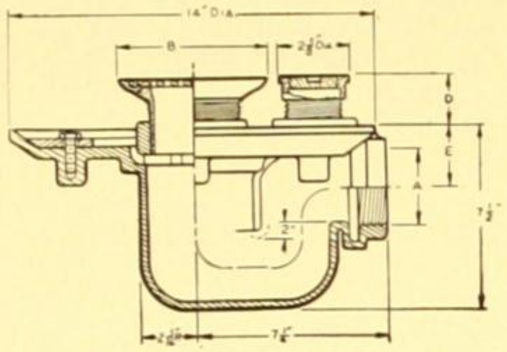
Z-453—I.P.S. Outlet

FLOOR OR SHOWER DRAIN — FIG. Z-455

With Integral Trap and Floor Level Cleanout



Z-455



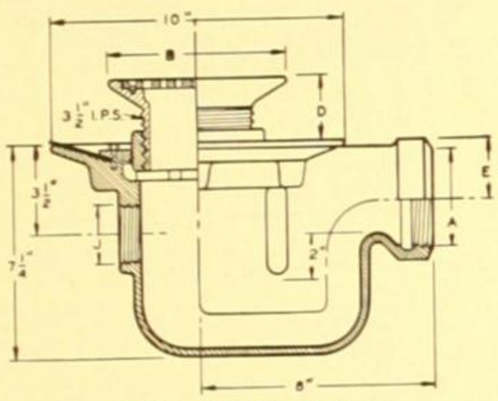
I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Top Add	Approx. Wt. Lbs.
1½-2"	$30.00	$44.10	$68.00	$3.40	37
3"	35.60	53.50	71.80	3.40	38
3"	38.00	55.90	74.20	3.80	39
4"	42.30	61.80	77.90	3.40	40
4"	44.70	64.20	80.30	3.80	41
Deduct for clamp collar	1.50	2.70	4.00		

Pipe Size A	B-Dia.	D Min.—Max.	E
1½-2"	5"**	1¼"—2¼"	2⅜"
3"	5"	1¼"—2¼"	2⅛"
3"	6"**	1¼"—2¼"	2⅛"
4"	5"	1¼"—2¼"	2⅝"
4"	6"	1¼"—2¼"	2⅝"

**Recommended sizes
Caulk outlet available.

FLOOR DRAIN With Supplementary Connection — FIG. Z-460



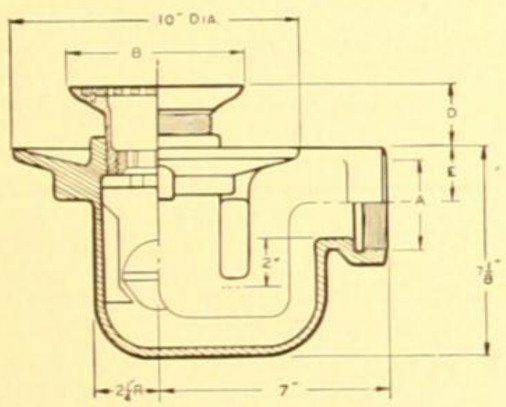
Z-460—I.P.S. Outlet

Pipe Size A	B-Dia.	D	E	J	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	4"	1" —2"	2½"	1½"—2"	$21.00	$33.00	$52.80	18
1½-2"	5"	1¼"—2¼"	2½"	1½"—2"	22.50	34.50	54.40	19
3"	5"	1¼"—2¼"	2"	1½"—2"	28.10	43.60	71.50	31
3"	6"	1¼"—2¼"	2"	1½"—2"	30.50	46.00	73.90	32
3"	7"	1⅞"—3"	2"	1½"—2"	34.50	50.00	77.90	33
4"	6"	1¼"—2¼"	2½"	1½"—2"	34.80	56.20	96.50	32
4"	7"	1¼"—2¼"	2½"	1½"—2"	37.20	58.60	98.90	33
4"	8"	1½"—3"	2½"	1½"—2"	41.20	62.60	102.90	34
Deduct for clamp collar					1.50	2.70	4.00	

Caulk outlet available.

For drinking fountains, refrigerator rooms and other floor areas where combined floor drainage and fixture waste connections are desired.

FLOOR DRAIN With Automatic Back Pressure Device — FIG. Z-470



Z-470—I.P.S. Outlet

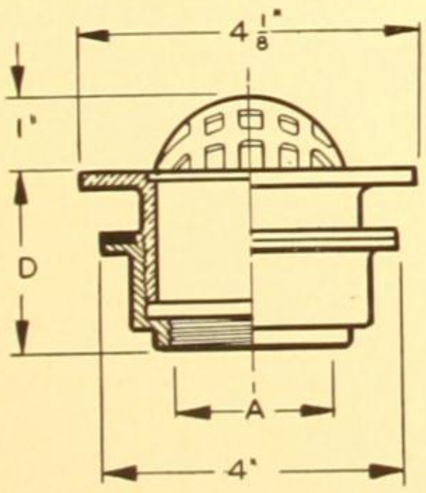
Pipe Size A	B-Dia.	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	5"	1¼"—2¼"	2½"	$28.50	$40.50	$62.40	35
3"	7"	1½"—3"	2"	40.50	50.70	84.30	36
4"	7"	1½"—3"	2½"	49.20	68.60	109.30	37
Deduct for clamp collar				1.50	2.70	4.00	

Caulk outlet available.

For control of backwater from other fixtures or street sewers.

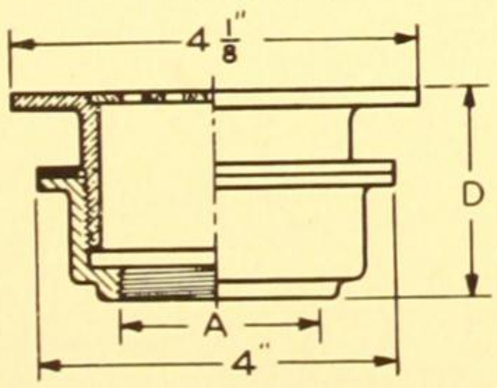
SHOWER OR URINAL DRAINS — FIGS. Z-475 & Z-475A

Dome Strainer



Z-475A—I.P.S. Outlet

Flat Strainer



Z-475—I.P.S. Outlet

Pipe Size A	All Bronze Pol.	All Bronze C. P.	W. M.	Add for Dome Strainer	Approx. Wt. Lbs.
2"	$11.00	$12.80	$14.70	$1.90	2
3"	15.00	16.80	18.70	2.20	5

Z-475

Pipe Size A	D Min.—Max.
2"	2½"—3¾"
3"	2¼"—3¾"

Z-475A

Pipe Size A	D Min.—Max.
2"	2½"—3¾"
3"	2¼"—3¾"

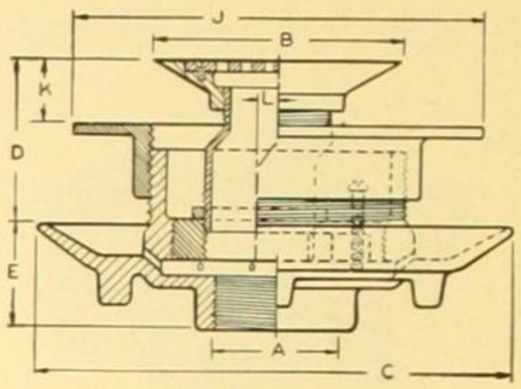
Caulk outlet available; "D" dimension approximately 1½" longer.

FIG. Z-476 URINAL DRAIN With Supporting Flange

Pipe Size A	B-Dia.	C	D Min.—Max.	E	J	K Min.—Max.	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	Add for W. M.
2"	4½"	9½"	3"—5"	2¼"	8¼"	¼"—3"	$35.90	$47.90	$60.20	$1.80	$2.80
3"	4½"	9½"	3"—5"	2¼"	8¼"	¼"—3"	38.40	50.80	62.10	1.80	2.80
Add for clamp collar							2.30	3.60	4.80		

Approx. Wt. Lbs. 2"—14, 3"—15.
Caulk outlet available; "E" dimension approximately 1½" longer.

Eccentric adjustability provides simple alignment required for variation in pottery or roughing.



Z-476—I.P.S. Outlet

INDUSTRIAL FLOOR AND AREA DRAINS . . . Pages 22 to 34

FIG. Z-500 AREA FLOOR DRAIN

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	$10.50	$18.30	$41.60	$20.30	$29.20	22
With square top	16.00	25.90	56.00	26.40	36.80	
Clamping collar add	2.40	4.80	6.40			
Grate only	2.80	4.80	7.70			
Secondary strainer add	1.60	2.90	4.00			
Low dome strainer	4.40	7.70	10.90			
High dome strainer	6.80	11.50	14.90			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			

Z-500

Bze Ring & Grate available for this

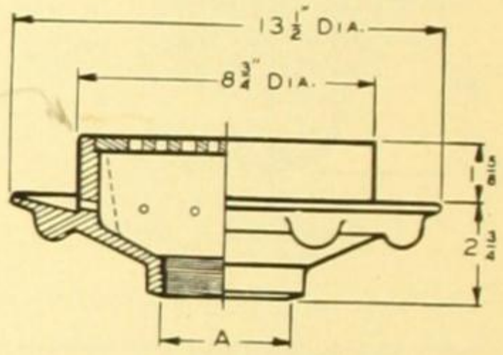
Add for B. W. Valve

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	$12.00	$16.30	$19.50

Add to (CB) and (GB) Lists for

Pipe Size		C. P.	W. M.
2-3-4"	Round Top	$4.80	$ 9.60
2-3-4"	Square Top	7.20	12.80

For caulk outlet, see Z-510.

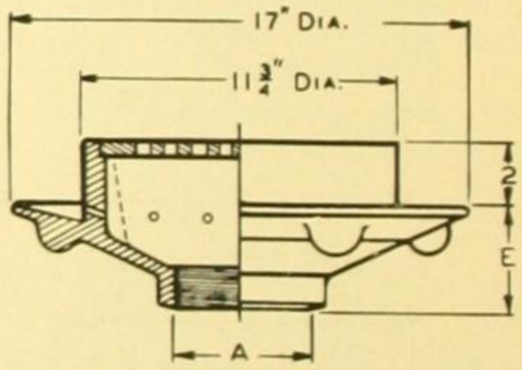


I.P.S. Outlet

For floor areas in dairies, packing plants, breweries, laundries, and other industrial and public buildings where floors are flushed and waste water does not carry sediment.

FIG. Z-505 AREA FLOOR DRAIN—Super Size

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
4-5-6"	$19.50	$35.00	$83.20	$36.00	$53.00	46
With square top	27.20	47.00	107.20	44.80	64.20	
Clamping collar add	3.20	4.80	8.00			
Grate only	4.00	7.70	19.20			
Secondary strainer add	2.40	3.80	4.80			
Low dome strainer	6.40	11.50	24.00			
High dome strainer	10.80	17.80	28.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			



Z-505—I.P.S. Outlet

Add for B. W. Valve

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)
4"	$12.00	$16.30	$19.50
5-6"	16.00	22.60	31.00

Add to (CB) and (GB) Lists for

Pipe Size		C. P.	W. M.
4-5-6"	Round Top	$ 9.60	$14.40
4-5-6"	Square Top	11.20	19.20

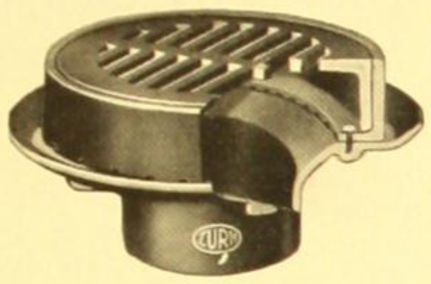
Pipe Size A	E
4"	3⅛"
5"	2¾"
6"	2¾"

For caulk outlet, see Z-515

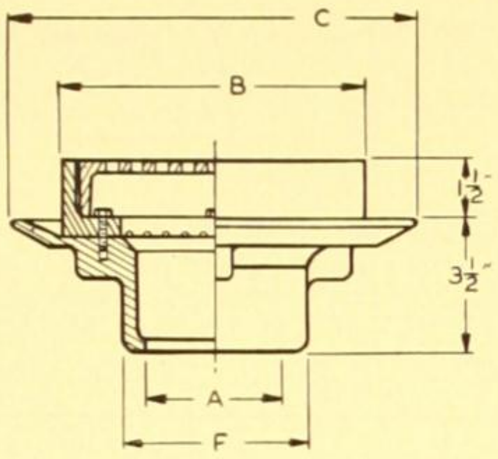
For same service as Z-500, but for heavier usage.

AREA FLOOR DRAIN— FIG. Z-509

Shallow Type With Deep Flange Strainer



Z-509



Caulk Outlet

Pipe Size A	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Top Coated (CB)	With Bronze Top Galv. (GB)	All Bronze (BR)
2-3"	$ 9.80	$17.10	$18.80	$26.10	$38.40
3-4"	10.50	18.30	20.30	29.10	41.60
4-6"	19.50	35.00	36.00	53.00	83.20

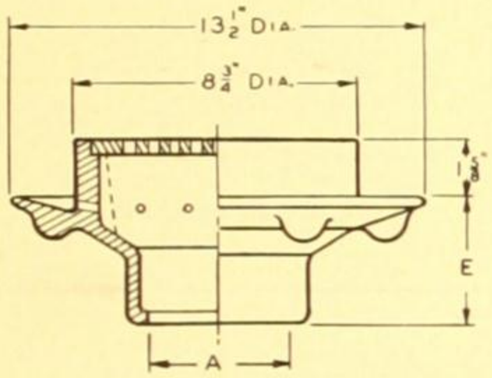
Pipe Size A	B-Dia.	C	F	Approx. Wt. Lbs.
2"	7"	9"	3 11/16"	14
3"	7"	9"	4 13/16"	15
3"	9"	11"	4 13/16"	17
4"	9"	11"	5 13/16"	21
4"	12"	15"	5 13/16"	45
6"	12"	15"	7 13/16"	46

I. P. S. outlet available.

Two piece body affords tight clamping for flashing; serrated upper clamping surfaces carry off seepage water from flashing or seepage pan.

For extra heavy traffic loads, rim and grate can be furnished in steel.

AREA FLOOR DRAIN FIG. Z-510



Z-510—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	$10.50	$18.30	$41.60	$20.30	$29.20	24
With square top	16.00	25.90	56.00	26.40	36.80	
Clamping collar add	2.40	4.80	6.40			
Grate only	2.80	4.80	7.70			
Secondary strainer add	1.60	2.90	4.00			
Low dome strainer	4.40	7.70	10.90			
High dome strainer	6.80	11.50	14.90			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			

Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	$12.00	$16.30	$19.50

Add to (CB) and (GB) Lists for

Pipe Size		C. P.	W. M.
2-3-4"	Round Top	$ 4.80	$ 9.60
2-3-4"	Square Top	7.20	12.80

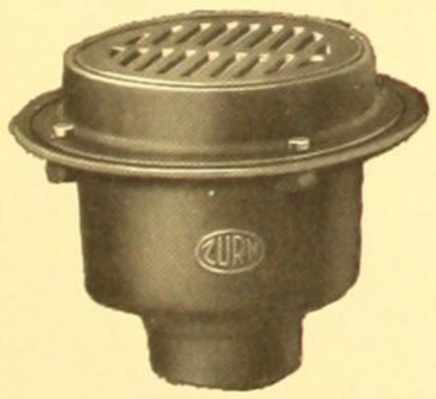
Pipe Size A	E
2"	4¾"
3"	4¾"
4"	4¼"

For I. P. S. outlet, see Z-500

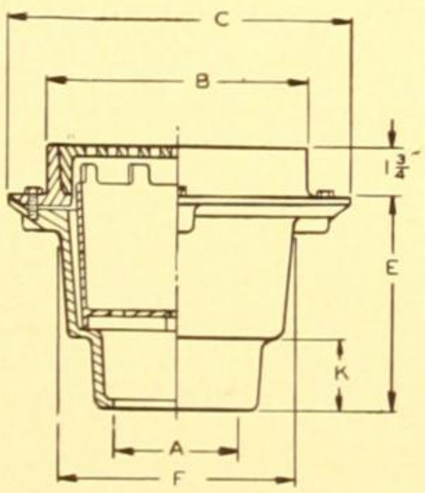
For same service as Z-500.

AREA FLOOR DRAIN— FIG. Z-511

Deep Type With Deep Flange Strainer and Bucket



Z-511



Caulk Outlet

Pipe Size A	Cast Iron Coated (DC)	Cast Iron Galv. (G)	With Bronze Top Coated (CB)	With Bronze Top Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4"	$23.40	$37.80	$38.70	$54.20	$ 65.40	41
3-4"	39.00	65.70	55.50	83.70	124.80	90

Pipe Size A	B-Dia.	C	E	F	K
3-4"	9"	12"	7½"	8⅝"	2½"
3-4"	12½"	16"	9¾"	12"	3¼"

I. P. S. outlet available.

For same service as Z-509. Provided with deep body and sediment bucket.

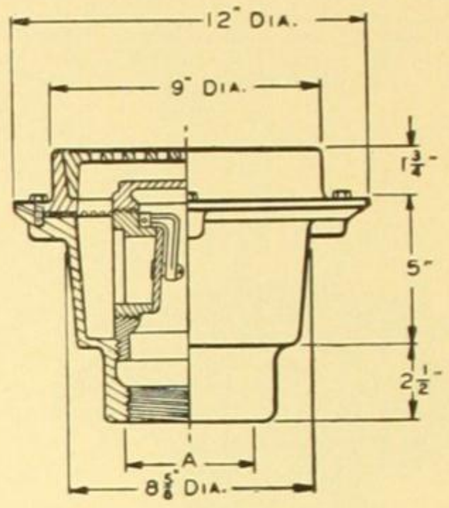
For extra heavy traffic loads, rim and grate can be furnished in steel.

FIG. Z-511-1 AREA FLOOR DRAIN With Automatic Back-Water Valve

Pipe Size A	Cast Iron (DC)	Cast Iron (G)	All Bronze	Pol. Top—Iron Body (DC)	Pol. Top—Iron Body (G)	Approx. Wt. Lbs
3-4"	$27.80	$43.40	$58.20	$43.10	$59.70	47
Add for auxiliary inlet	4.50	6.30	8.00			

Caulk outlet available.

For same service as Z-511. Vertical swing gate type backwater valve.



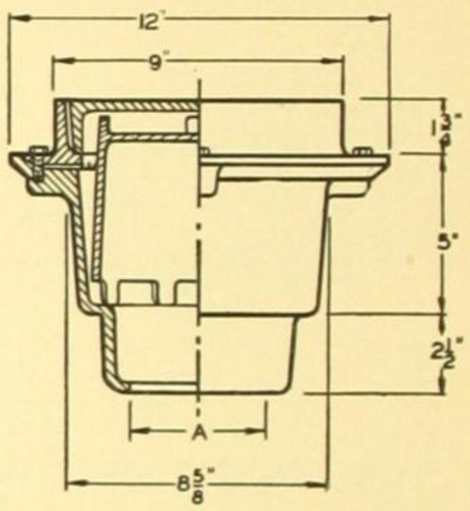
Z-511-1—I.P.S. Outlet

FIG. Z-511-2 AREA FLOOR DRAIN With Bell, and Deep Flange Strainer

Pipe Size A	Cast Iron (DC)	Cast Iron (G)	All Bronze	Pol. Top—Iron Body (DC)	Pol. Top—Iron Body (G)	Approx. Wt. Lbs.
3-4"	$21.50	$35.40	$69.30	$36.80	$51.90	41

I. P. S. outlet available.

For same service as Z-511. Inverted dome in body forms bell trap.



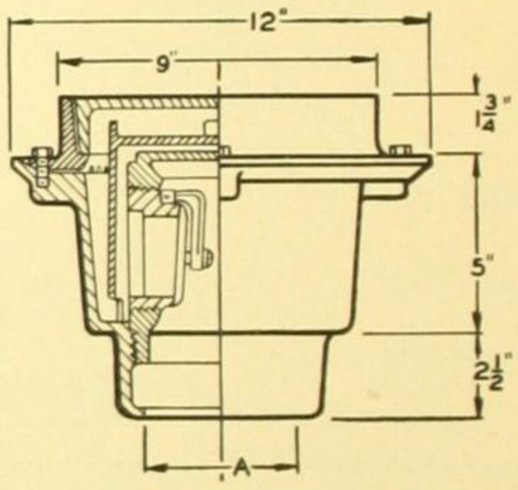
Z-511-2—Caulk Outlet

FIG. Z-511-3 AREA FLOOR DRAIN
With Bell, Automatic Back-Water Valve, and Deep Flange Strainer

Pipe Size A	Cast Iron (DC)	Cast Iron (G)	All Bronze	Pol. Top—Iron Body (DC)	Pol. Top—Iron Body (G)	Approx. Wt. Lbs.
3-4"	$30.60	$48.50	$88.60	$45.90	$64.80	48

I. P. S. outlet available.

For same service as Z-511. Has combination bell trap and backwater valve assembly.

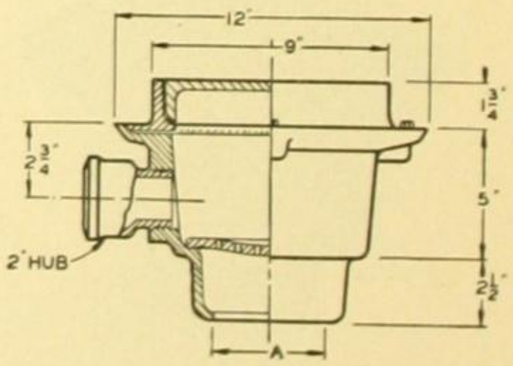


Z-511-3—Caulk Outlet

FIG. Z-511-4 AREA FLOOR DRAIN
With Secondary Strainer Auxiliary Inlet, and Deep Flange Strainer

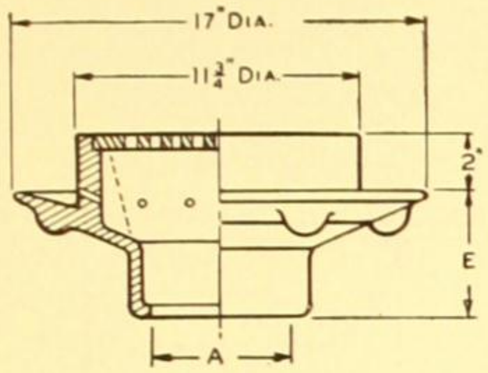
Pipe Size A	Cast Iron (DC)	Cast Iron (G)	All Bronze	Pol. Top—Iron Body (DC)	Pol. Top—Iron Body (G)	Approx. Wt. Lbs.
3-4"	$25.40	$40.50	$75.80	$40.70	$56.90	44

I. P. S. outlet available.



Z-511-4—Caulk Outlet

AREA FLOOR DRAIN—Super Size — FIG. Z-515



Z-515—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
4-5-6"	$19.50	$34.90	$83.20	$36.00	$52.90	46
With square top	27.20	47.00	107.20	44.80	64.10	
Clamping collar add	3.20	4.80	8.00			
Grate only	4.00	7.70	19.20			
Secondary strainer add	2.40	3.80	4.80			
Low dome strainer	6.40	11.50	24.00			
High dome strainer	10.80	17.80	28.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			

Pipe Size A	E
4"	4⅝"
5"	5"
6"	5"

For I. P. S. connection, see Z-505

Add for B. W. Valve

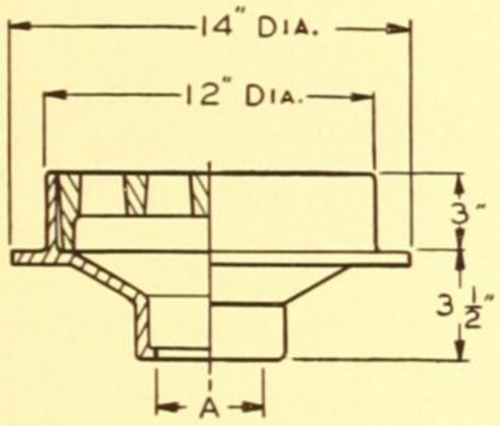
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)
4"	$12.00	$16.30	$19.50
5-6"	16.00	22.60	31.00

Add to (CB) and (GB) Lists for

Pipe Size		C. P.	W. M.
4-5-6"	Round Top	$ 9.60	$14.40
4-5-6"	Square Top	11.20	19.20

For same service as Z-500 but for greater volume.

FACTORY AREA FLOOR DRAIN, Extra Heavy Duty Type — FIG. Z-516



Z-516—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for I. P. S. Outlet	Approx. Wt. Lbs.
2-3-4"	$17.40	$33.90	$67.70	$ .50	65
5-6"	17.70	34.20	67.80	.60	77

I. P. S. available

For heavy trucking shock loads. Deep strainer flange prevents displacement of strainer from seat.

AREA FLOOR DRAIN With Side Outlet — FIG. Z-520

Z-520—I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
1½-2"	$19.20	$30.80	$62.40	$29.00	$42.50	32
3"	19.20	30.80	62.40	29.00	42.50	33
4"	19.20	30.80	62.40	29.00	42.50	34
5"	32.60	55.50	126.70	49.10	73.70	50
6"	32.60	55.50	126.70	49.10	73.70	50
With square top—9x9"	25.30	39.00	76.80	37.30	51.00	
With square top—12x12"	41.10	67.20	150.70	58.70	86.20	
Clamp. col. "small" add	2.40	3.80	6.40			
Clamp. col. "large" add	3.20	4.80	8.00			
Grate only—8¼"	2.80	4.80	7.70			
Grate only—11¼"	4.00	7.70	19.20			
Sec. str. "small" add	1.60	2.90	4.00			
Sec. str. "large" add	2.40	3.80	4.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			

Add to (CB) and (GB) Lists for

Pipe Size	C. P. Round Top	C. P. Square Top	W. M. Round Top	W. M. Square Top
2-3-4"	$ 4.80	$ 7.20	$ 9.60	$12.80
5-6"	9.60	11.20	14.40	19.20

For same service as Z-500 but with side outlet for limited space.

(Z-520 continued on following page)

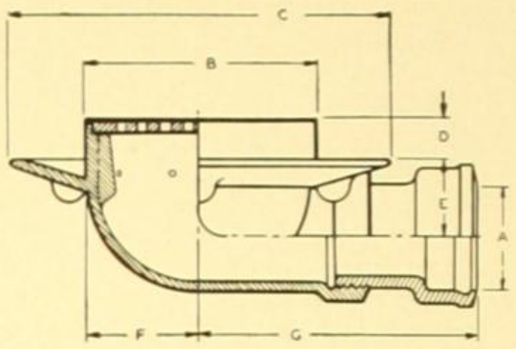
FIG. Z-520 AREA FLOOR DRAIN (Cont.)

FIG. Z-520 I. P. S.
Pipe Size

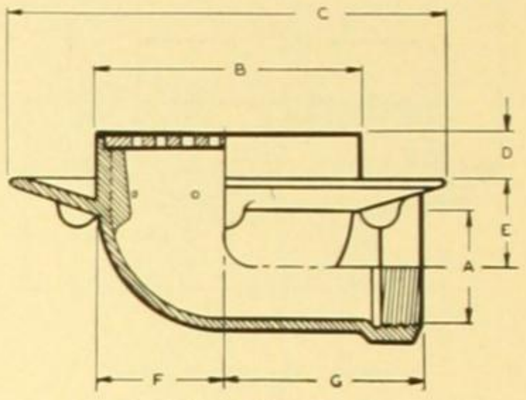
A	B-Dia.	C	D	E	F	G
1½-2″	8⅞″	13½″	1¼″	3¾″	4 7/16″	5⅝″
3″	8⅞″	13½″	1¼″	3½″	4 7/16″	5⅝″
4″	8⅞″	13½″	1¼″	3¼″	4 7/16″	5⅝″
5″	11¾″	17″	2″	5¼″	5⅞″	7½″
6″	11¾″	17″	2″	5″	5⅞″	7½″

FIG. Z-520 Caulk
Pipe Size

A	B-Dia.	C	D	E	F	G
1½-2″	8⅞″	13½″	1¼″	3¾″	4 7/16″	9¼″
3″	8⅞″	13½″	1¼″	3½″	4 7/16″	9⅜″
4″	8⅞″	13½″	1¼″	3¼″	4 7/16″	9½″
5″	11¾″	17″	2″	5¼″	5⅞″	10¾″
6″	11¾″	17″	2″	5″	5⅞″	10⅞″



Z-520—Hub Outlet



Z-520—I.P.S. Outlet

FIG. Z-530 DOUBLE DUTY AREA DRAIN

With Supplementary Strainer

Pipe Size A	E	E′	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2-3-4″	3″	4⅝″	$21.80	$37.80	$92.80	$38.30	$55.80
With square top			31.20	52.80	118.40	48.80	69.10
Clamping collar add			3.20	4.80	9.60		
Secondary strainer only			2.40	3.80	4.80		
Grate only			4.80	8.60	17.60		
Low dome strainer			8.00	13.40	25.60		
High dome strainer			14.40	22.10	32.00		
Hinged grate add			3.20	3.20	3.20		
Locking device add			2.50	2.50	2.50		
Primer connection add			2.50	2.50	2.50		

Approx. Wt. Lbs. 2-3-4″—48.

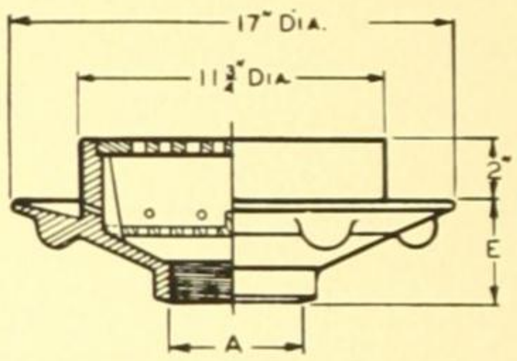
Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4″	$12.00	$16.30	$19.50

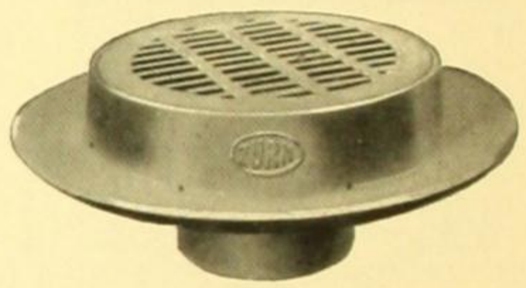
Add to (CB) and (GB) Lists for

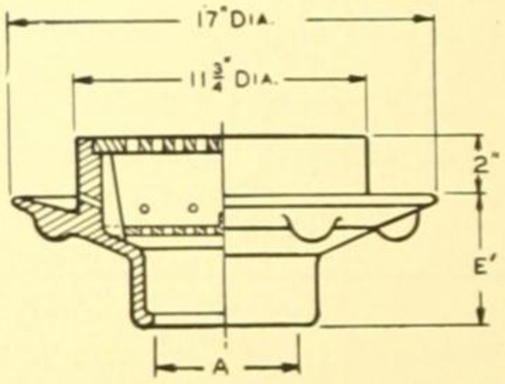
		C. P.	W. M.
2-3-4″	Round Top	$ 9.60	$14.40
2-3-4″	Square Top	11.20	19.20

For floor areas in industrial buildings where waste water carries foreign solids or other clogging material.



I.P.S. Outlet


Z-530



Caulk Outlet

FIG. Z-535 DOUBLE DUTY AREA DRAIN—Super Size With Secondary Strainer

Pipe Size A	E	E′	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
3-4″	5″	3½″	$34.80	$61.90	$134.40	$64.80	$93.10	82
5″	5″	3⅛″	36.30	63.70	136.00	66.30	94.90	84
6″	5¼″	3¼″	37.60	65.50	137.60	67.80	96.70	86
8″	5″	3½″	42.30	70.90	142.30	72.30	102.10	88
Square rim and round grate add			11.20	11.40	36.00	11.20	11.40	
Clamping device add			6.40	10.60	16.00			
Grate only			12.00	20.20	35.20			
Secondary strainer only			4.00	5.80	7.20			
Low dome strainer			16.80	28.80	50.40			
High dome strainer			20.00	34.60	57.60			
Hinged Grate add			3.20	3.20	3.20			
Locking device add			2.50	2.50	2.50			
Primer connection add			2.50	2.50	2.50			

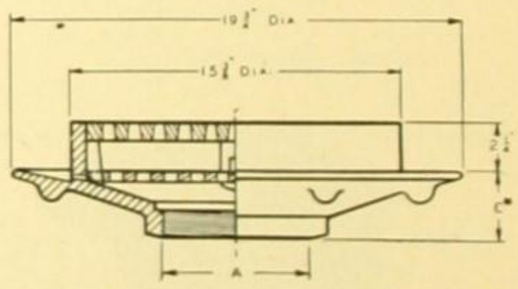
Add to (CB) and (GB) Lists for

	C. P.	W. M.
Round Top	$14.40	$25.60
Square Top	16.00	32.00

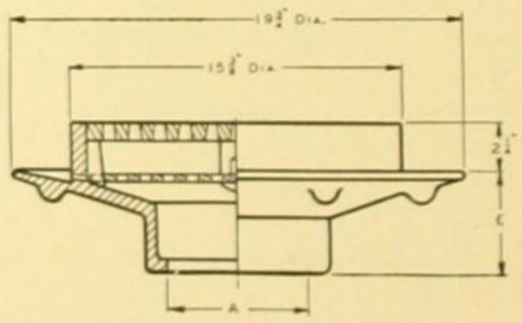
Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
3-4″	$12.00	$16.30	$19.50
5-6″	16.00	22.60	30.00
8″	22.40	30.70	44.80

For same service as Z-530 but for heavier usage.



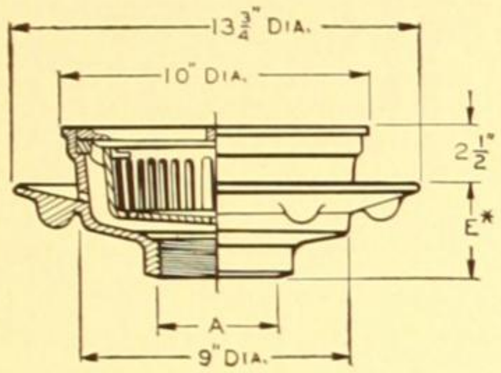
I.P.S. Outlet



Z-535—Caulk Outlet

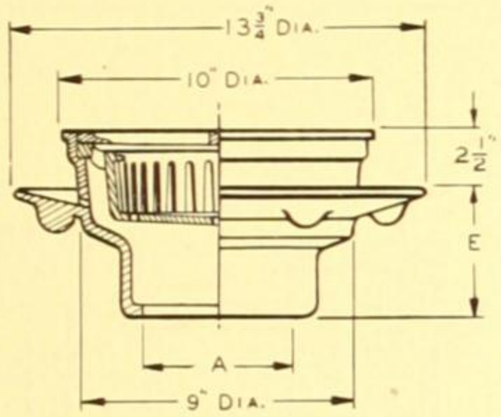
Z-540

FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type FIG. Z-540



I.P.S. Outlet

Pipe Size A	E	E*	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	4½"	2½"	$14.40	$23.00	$30.40	$41.40	$42.60	35
With square top			17.00	26.90	27.40	38.00	57.00	
With side outlet			20.00	31.80	30.00	43.50	63.40	
With side outlet and square top			18.70	29.90	38.70	53.90	54.30	
Grate only			2.40	3.80	5.60	6.70	6.10	
Hinged Grate, add			3.20	3.20	3.20	3.20	3.20	
Clamping device, add			3.40	5.80	2.40	3.80	7.40	
B.W.V., add			12.00	16.30	....	....	....	



Caulk Outlet

Pipe Size	Add to Bronze Top Price for C. P.	W. M.
2-3-4"	$5.00	$10.60
With square top	8.20	13.80
With side outlet	5.80	5.80
With side outlet and square top	8.20	8.20

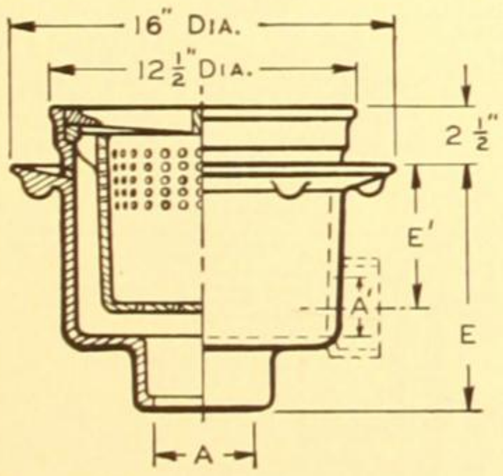
Provided with removable perforated sediment bucket. Assures continuous flow even though sediment bucket is filled. Bucket must always be returned, as top strainer will make improper fit without it.

All features of Z-540 type drain are incorporated in all drains from Z-540 to Z-544A—Pages 27 to 30 inclusive.

Z-541

FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type FIG. Z-541

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4"	$28.80	$49.90	$54.40	$78.70	$100.10	64
5-6"	32.00	53.80	57.60	82.60	103.50	67
With square top 3-4"	30.20	52.30	57.10	82.60	105.00	
With side outlet 3-4"	36.00	60.50	68.00	98.40	125.00	
With side outlet and square top 3-4"	37.40	63.00	70.70	102.20	130.10	
With square top 5-6"	33.40	56.20	60.30	86.40	108.60	
With side outlet 5-6"	39.20	64.30	71.20	102.20	128.50	
With side outlet and square top 5-6"	40.60	66.90	73.90	106.10	133.50	
Grate only	4.80	8.60	12.80	12.80	12.80	
Hinged grate, add	3.20	3.20	3.20	3.20	3.20	
Clamping device, add	5.00	6.90	5.00	6.90	11.10	
B.W.V. 3-4", add	12.00	16.30	12.00	16.30	....	
B.W.V. 5-6", add	16.00	22.60	16.00	22.60	....	



Caulk Outlet

Pipe Size	Add for C. P.	W. M.
3-4"	$7.30	$12.50
5-6"	7.30	12.50
With square top 3-4"	8.70	14.60
With side outlet 3-4"	7.30	13.00
With side outlet and square top 3-4"	8.70	14.60
With square top 5-6"	8.70	14.60
With side outlet 5-6"	7.30	13.00
With side outlet and square top 5-6"	8.70	14.60

Pipe Size A	A'	E	E'
3"	3"	6¾"	3⅛"
4"	4"	6¾"	3½"
5"		6¾"	
6"		6¾"	4¾"

I.P.S. outlet available

See details under Fig. Z-540.

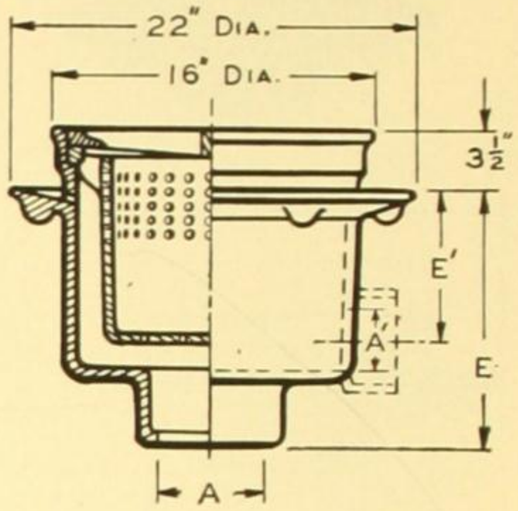
FIG. Z-541A FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type, With Removable Perforated Sediment Bucket

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4″	$76.80	$129.00	$108.80	$158.40	$205.40	135
5-6″	80.00	127.70	112.00	162.20	208.80	137
With square top 3-4″	80.60	129.90	114.20	166.20	234.90	
With square top 5-6″	83.80	133.90	117.40	170.10	238.40	
Grate only	6.40	10.60	14.40	14.40	15.70	
Hinged grate, add	6.40	6.40	8.00	8.00	8.00	
Clamping Device, add	9.60	13.40	9.60	13.40	29.60	

Pipe Size	Add for C. P.	W. M.	Pipe Size A	A′	E	E′
3-4″	$13.10	$20.90	3″	3″	8½″	4⅛″
5-6″	13.10	20.90	4″	4″	8½″	3⅞″
With square top 3-4″	15.70	26.00	5″		8½″	
With square top 5-6″	15.70	26.00	6″		8½″	

I. P. S. outlet available.

See details under Fig. Z-540.



Z-541A—Caulk Outlet

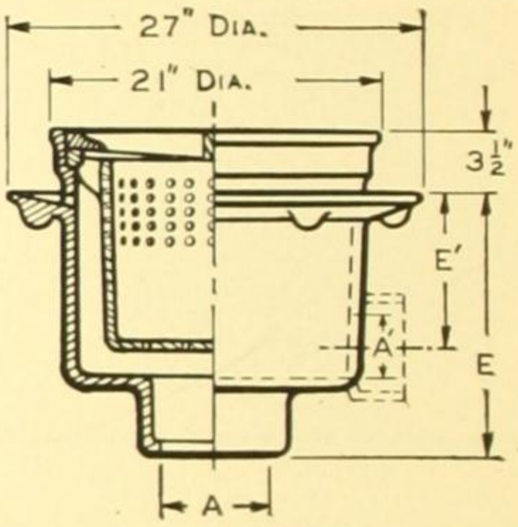
FIG. Z-541B FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type, With Removable Perforated Sediment Bucket

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4″	$139.20	$207.40	$212.80	$290.00	$440.30	256
5-6″	142.40	211.20	216.00	293.80	443.70	259
With square top 3-4″	163.20	242.00	233.60	313.90	480.30	
With square top 5-6″	166.40	245.80	236.80	318.80	483.80	
Grate only	8.00	13.40	32.00	32.00	34.80	
Hinged grate, add	11.20	11.20	12.80	12.80	11.20	
Clamping device, add	12.80	19.20	12.80	19.20	36.50	

Pipe Size	Add for C. P.	W. M.	Pipe Size A	A′	E	E′
3-4″	$21.80	$43.50	3″	3″	11½″	6½″
5-6″	21.80	43.50	4″	4″	11½″	6½″
With square top 3-4″	29.60	52.20	5″	5″	11½″	6½″
With square top 5-6″	29.60	52.20	6″	6″	11½″	6″

I. P. S. outlet available.

See details under Fig. Z-540.



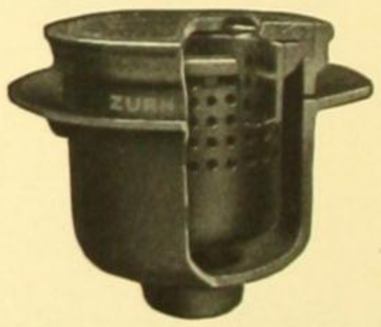
Z-541B—Caulk Outlet

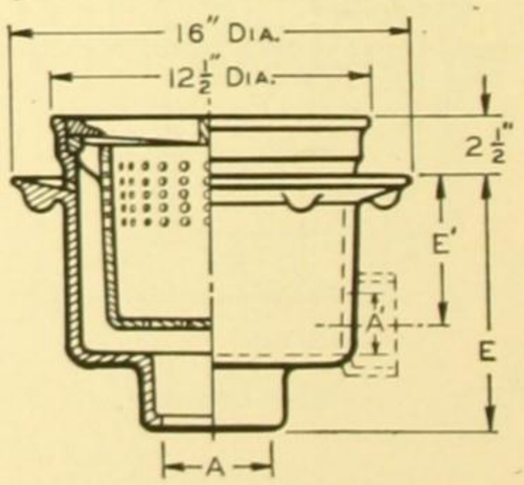
FIG. Z-542 FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Deep Type, With Removable Perforated Sediment Bucket

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4″	$52.80	$ 77.80	$71.20	$ 97.90	$140.90	76
5-6″	56.00	81.60	74.40	101.80	144.40	80
With square top 3-4″	57.60	84.50	75.20	104.60	151.40	
With side outlet 3-4″	79.20	110.40	96.80	129.60	211.40	
With side outlet and square top 3-4″	84.00	117.10	101.60	136.30	221.90	
With square top 5-6″	60.80	88.30	78.40	108.50	154.90	
With side outlet 5-6″	82.40	114.20	100.00	133.40	214.90	
With side outlet and square top 5-6″	87.20	121.00	104.80	140.20	225.30	
Grate only	4.80	8.70	12.80	12.80	12.80	
Hinged grate, add	3.20	3.20	3.20	3.20	3.20	
Clamping device, add	5.00	6.90			11.10	

Pipe Size	Add for C. P.	W. M.	Pipe Size A	A′	E	E′
3-4″	$7.30	$13.90	3″	3″	11″	6½″
5-6″	7.30	13.90	4″	4″	11″	6½″
With square top 3-4″	8.70	14.60	5″	5″	11″	6″
With side outlet 3-4″	7.30	13.00	6″	6″	11″	5½″
With side outlet & square top 3-4″	8.70	14.60	I. P. S. outlet available.			
With square top 5-6″	8.70	14.60				
With side outlet 5-6″	7.30	13.00				
With square top & side outlet 5-6″	8.70	14.60				

See details under Fig. Z-540.

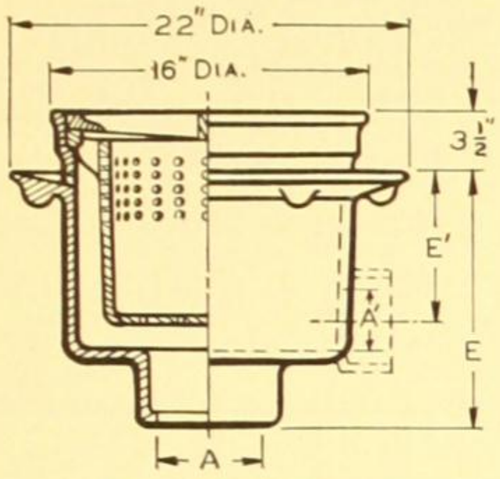

Z-542



Caulk Outlet

FLOOR AND AREA DRAIN, FIG. Z-542A

Continuous Flow Solids Retaining Deep Type, With Removable Perforated Sediment Bucket



Z-542A—Caulk Outlet

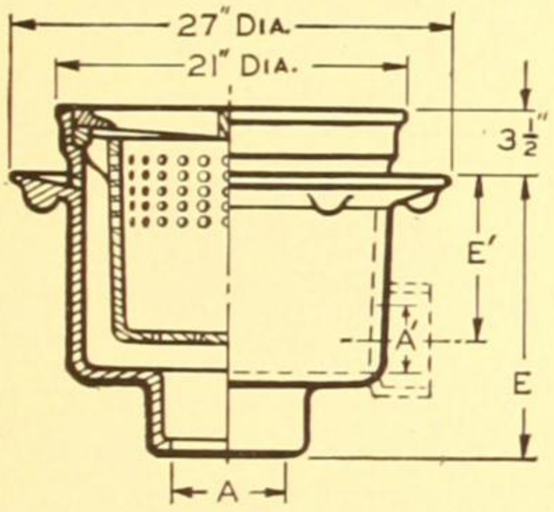
Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4"	$ 92.80	$130.60	$124.80	$184.30	$240.10	159
5-6"	96.00	134.40	128.00	188.20	243.60	163
With square top 3-4"	97.40	138.10	131.00	193.40	271.40	
With square top 5-6"	100.60	141.90	134.20	197.30	274.90	
With side outlet 3-4"	116.00	168.00	156.00	230.40	365.40	
With side outlet 5-6"	119.20	171.90	159.20	234.30	368.90	
With side outlet and square top 3-4"	117.40	171.90	159.00	235.70	393.30	
With side outlet and square top 5-6"	120.60	175.50	162.20	239.70	396.80	
Grate only	6.40	10.60	14.40	14.40	14.40	
Hinged grate, add	6.40	6.40	8.00	8.00	8.00	
Clamping device, add	9.60	13.40	9.60	13.40	29.60	

Pipe Size	Add for C. P.	W. M.	Pipe Size A	A'	E	E'
3-4"	$13.10	$20.90	3"	3"	11½"	7¾"
5-6"	13.10	20.90	4"	4"	11½"	7"
With square top 3-4"	15.70	26.00	5"	5"	11½"	6½"
With square top 5-6"	15.70	26.00	6"	6"	11½"	6"
With side outlet 3-4"	13.10	20.90	I. P. S. outlet available.			
With side outlet 5-6"	13.10	20.90				
With square top & side outlet 3-4"	15.70	26.00				
With square top & side outlet 5-6"	15.70	26.00				

See details under Fig. Z-540.

FLOOR AND AREA DRAIN, FIG. Z-542B

Continuous Flow Solids Retaining Deep Type, With Removable Perforated Sediment Bucket



Z-542B—Caulk Outlet

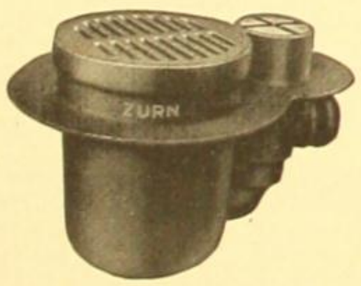
Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4"	$152.60	$228.00	$225.60	$312.00	$490.70	256
5-6"	154.80	231.80	228.80	315.80	495.00	259
With square top 3-4"	179.20	263.00	246.40	337.90	532.40	
With square top 5-6"	182.40	266.90	249.60	341.80	535.90	
Grate only	8.00	13.40	32.00	32.00	32.00	
Hinged grate, add	11.20	11.20	12.80	12.80	12.80	
Clamping device, add	12.80	19.20	12.80	19.20	36.50	

Pipe Size	Add for C. P.	W. M.	Pipe Size A	A'	E	E'
3-4"	$21.80	$43.50	3"	3"	14½"	10"
5-6"	21.80	43.50	4"	4"	14½"	9½"
With square top 3-4"	29.60	52.20	5"	5"	14½"	9"
With square top 5-6"	29.60	52.20	6"	6"	14½"	8½"
I. P. S. outlet available.						

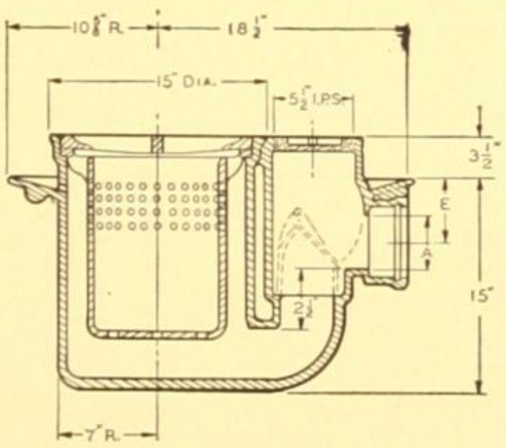
See details under Fig. Z-540.

FLOOR AND AREA DRAIN, FIG. Z-544

With Combined Trap and Floor Level Cleanout; Continuous Flow Solids Retaining Type



Z-544



Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)
2-3-4"	$190.40	$276.50	$272.00	$374.40	$626.40
Grate only	6.40	10.60	14.40	14.40	15.70
Hinged grate, add	6.40	6.40	8.00	8.00	8.00
Clamping device, add	16.80	24.00	16.80	24.00	37.40
B.W.V. add	12.80	12.80			

Approx. Wt. Lbs. 2-3-4"—210.

Pipe Size	Add for C. P.	W. M.
2-3-4"	$21.80	$43.50

Pipe Size A	E
2"	6½"
3"	6"
4"	5½"

I. P. S. outlet available.

See details under Fig. Z-540.

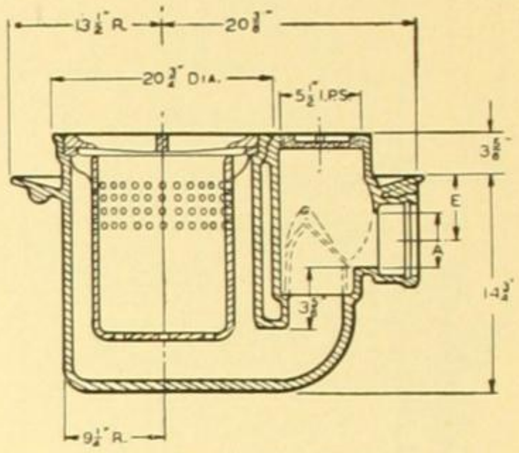
FIG. Z-544A FLOOR AND AREA DRAIN,
Continuous Flow Solids Retaining Type, With Combined Trap and Floor Level Cleanout

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″	$273.60	$391.70	$393.60	$537.60	$814.40	260
Grate only	8.00	13.50	32.00	32.00	34.80	
Hinged grate, add	11.20	11.20	12.80	12.80	11.20	
Clamping device, add	27.20	40.30	27.20	40.30		
B.W.V. add	12.80	12.80				

Pipe Size	Add for C. P.	W. M.
2-3-4″	$31.30	$59.20

Pipe Size A	E
2″	5 3/8″
3″	4 7/8″
4″	4 3/8″

I. P. S. outlet available.



Z-544A—Caulk Outlet

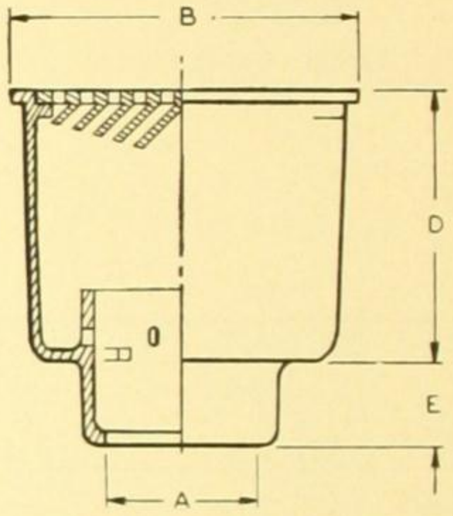
See details under Fig. Z-540.

FIG. Z-545 AREA FLOOR DRAIN With Deflector Strainer

Pipe Size A	B-Square	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3″	6¾″	4″	2″	$18.00	$29.20	$55.70	27
3-4″	10½″	7¾″	2¾″	30.00	50.40	96.00	70
5-6″	10½″	7¾″	2¾″	33.00	55.80	105.60	72
"Deflector" strainer only, small				5.10	8.60	15.40	
Flat strainer only, small				1.90	4.00	5.80	
"Deflector" strainer only, large				7.00	11.90	21.10	
Flat strainer only, large				2.90	5.80	8.60	

I. P. S. outlet available.

For schools, playgrounds, asylums, and other institutions to protect drainage lines from clogging by injection of sticks and other objects through the strainer.



Z-545—Caulk Outlet

FIG. Z-546 SCHOOL PLAYGROUND DRAIN With Deflector Grate and Secondary Strainer

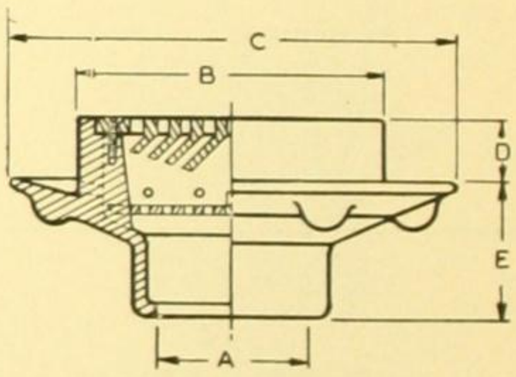
Pipe Size A		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4″		$21.60	$36.70	$58.60	28
4-5-6″		36.90	60.50	96.00	52
"Deflector" grate only—	Small	9.60	17.30	24.00	
	Large	14.40	20.00	32.00	
Secondary strainer only—	Small	2.40	3.80	4.80	
	Large	2.90	5.80	5.80	
Clamping collar add—	Small	2.40	3.80	4.80	
	Large	3.20	4.80	9.60	

Pipe Size A	B-Dia.	C	D	E
2″	8¾″	13½″	1⅝″	2¾″
3″	8¾″	13½″	1⅝″	2¾″
4″	8¾″	13½″	1⅝″	2¾″
4″	11¾″	17″	2″	4⅝″
5″	11¾″	17″	2″	5″
6″	11¾″	17″	2″	5″

I. P. S. outlet available.

For same service as Z-545.

Z-546



Caulk Outlet

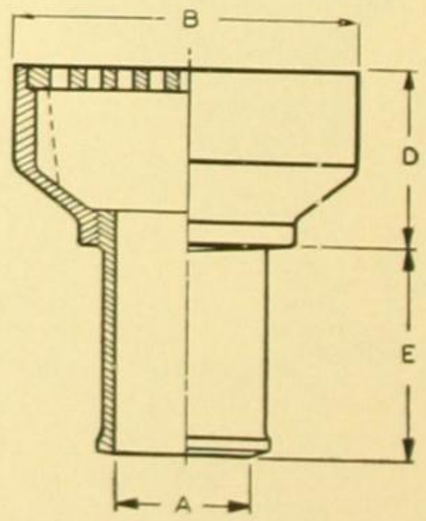
FIG. Z-548 FLOOR DRAIN

Pipe Size A	B-Dia.	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2″	8¾″	4½″	6″	$ 9.80	$17.20	$37.10	$21.00	$29.60	24
3″	8¾″	4½″	6″	11.10	20.70	45.80	22.40	33.10	25
4″	8¾″	4½″	6″	13.70	25.80	52.30	26.00	38.30	26
2″	11¾″	5″	6″	13.50	23.40	51.20	34.50	46.80	47
3″	11¾″	5″	6″	15.00	27.00	60.80	37.50	52.20	48
4″	11¾″	5⅛″	6″	18.00	32.40	67.20	42.00	59.40	49

Add for back water valve (only furnished when specified) 2″—$6.40 3″—$9.60 4″—$12.80

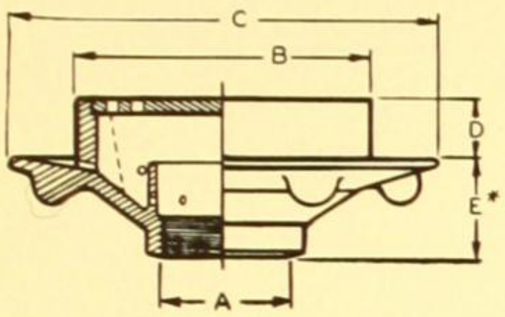
I. P. S. outlet available.

Where long outlet is required.



Z-548—Caulk Outlet

FLOOR DRAIN With Sand Retainer — FIG. Z-549



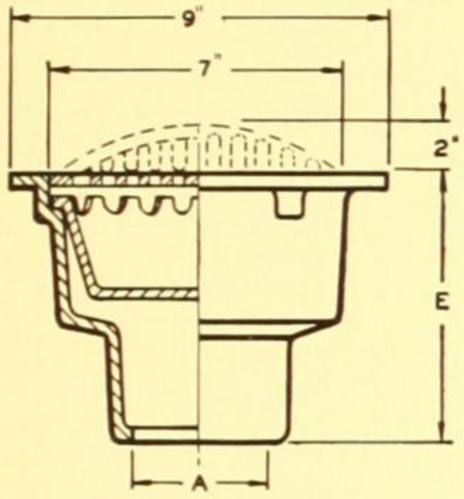
Z-549—I.P.S. Outlet

Pipe Size A	B-Dia.	C	D	E	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
3-4"	11¾"	17"	2"	3⅛"	$25.90	$42.30	$44.60	$63.00	47
5"	15⅜"	19¾"	2"	3"	42.00	70.60	78.00	112.00	88
6"	15⅜"	19¾"	2"	3"	43.50	72.40	79.50	113.80	90
Clamping collar add—Small					3.20	4.80			
		Large			6.40	10.60			

Caulk outlet available; "E" dimension approximately 1½" longer.

For heavy trucking areas; strainer will carry 2000 lbs. Interior sand retaining ring will keep sediment out of drain line.

PLAIN FLOOR DRAIN With Sediment Bucket — FIG. Z-550



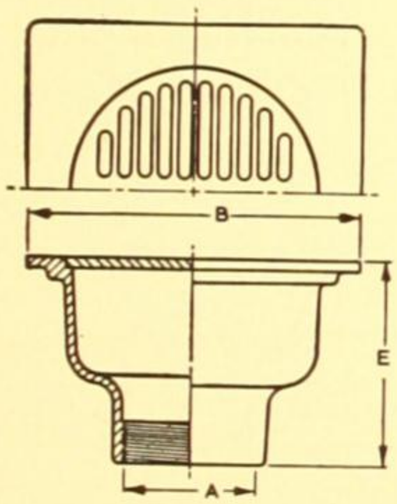
Z-550—Caulk Outlet

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	5¼"	$ 9.90	$15.50	$30.40	$16.70	$22.70	11
FIG. Z-550A with dome strainer, inside caulk connection							
2-3-4"		11.40	17.50	33.00	19.30	25.30	12
Semi-dome strainer only		3.80	5.60	12.20	12.20	12.20	
Sediment bucket deduct		3.90	5.00	5.40			
Flat strainer only		2.30	3.60	9.60			

I. P. S. outlet available.

For window wells, basement entrances or floors where seepage control is unnecessary.

PLAIN FLOOR DRAIN — FIG. Z-555

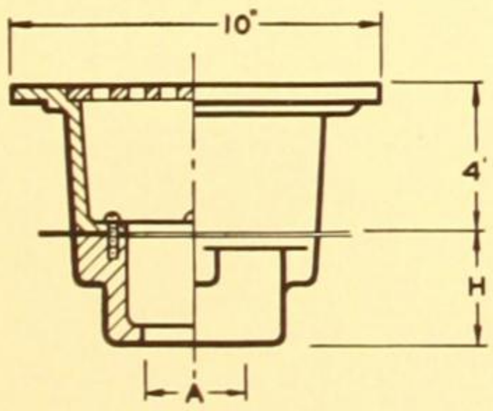


Z-555—I.P.S. Outlet

Pipe Size A	B	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2"	6"	3"	$ 3.00	$ 7.20	$18.00	$ 7.40	$11.70	3
3"	9"	5¼"	7.20	17.30	43.20	13.20	24.00	10
4"	12"	5⅜"	9.60	23.00	57.60	26.30	41.20	20
Add for hinged strainer			3.00	3.00	3.00	3.00	3.00	

Caulk outlet available; "E" dimension approximately 1½" longer.

PLAIN FLOOR DRAIN With Hinged Strainer and Flashing Provision — FIG. Z-556



Z-556—Caulk Outlet

Pipe Size A	H	Coated (DC)	Galv. (G)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
3"	2½"	$ 9.60	$16.20	$18.00	$26.10	13
4"	2½"	10.70	19.40	19.70	30.20	14
Strainer only		2.60	4.50			

I. P. S. outlet available.

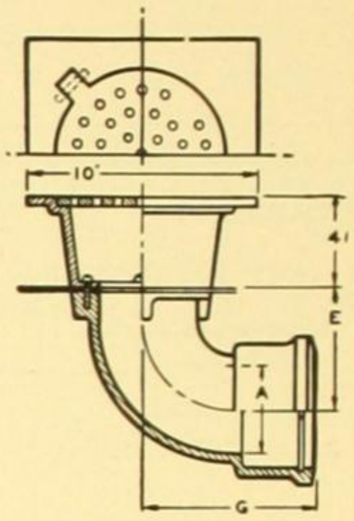
For floor areas where copper or lead flashing is necessary for seepage control.

FIG. Z-556A PLAIN FLOOR DRAIN With Side Outlet, Hinged Strainer and Flashing Provision

Pipe Size A	E	G	Coated (DC)	Galv. (G)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2"	5¼"	7½"	$21.00	$35.30	$30.00	$46.10	30
3-4"	5¼"	7½"	22.50	37.10	31.50	47.90	35
Strainer only			2.60	4.50			

I. P. S. outlet available.

For same service as Z-556.



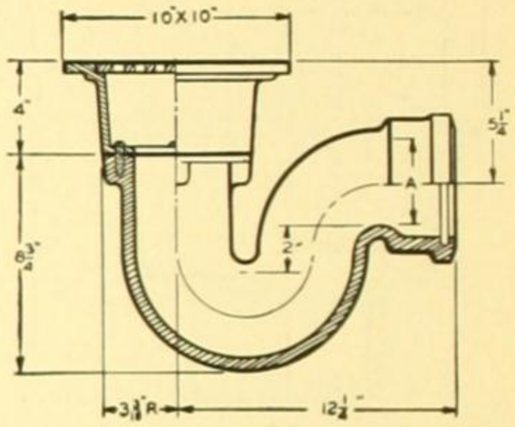
Z-556A—Hub Outlet

FIG. Z-556B FLOOR DRAIN AND TRAP With Hinged Strainer and Flashing Provision

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
3"	$27.00	$45.40	$40.50	$61.60	42
4"	28.50	47.20	42.00	63.40	43

I. P. S. outlet available.

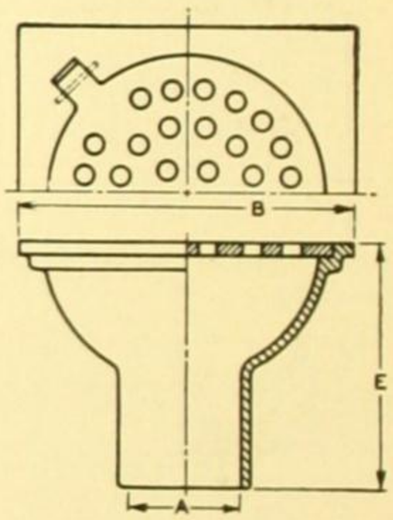
For floor areas requiring integral trap and copper or lead flashing for seepage control.



Z-556B—Hub Outlet

FIG. Z-560 PLAIN FLOOR DRAIN With Hinged Strainer

Pipe Size A	B	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2"	6x6"	3"	$ 2.70	$ 6.30	$15.80	$ 7.90	$12.60	4
3"	9x9"	6½"	5.30	12.60	31.50	14.70	24.00	15
4"	12x12"	7¾"	10.50	25.20	63.00	28.20	46.40	27

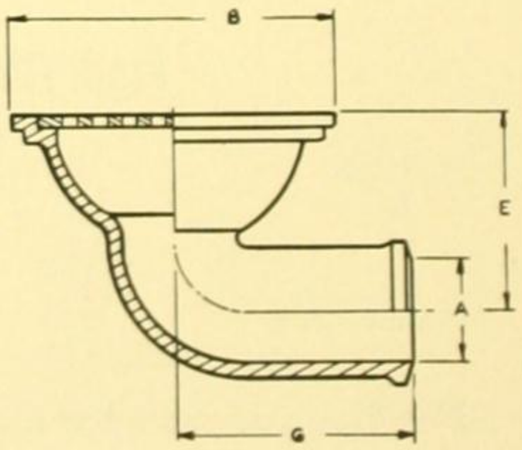


Z-560—Spigot Outlet

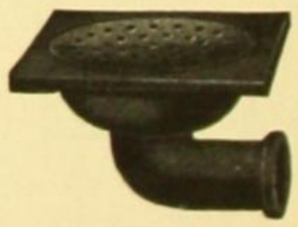
FIG. Z-565 PLAIN FLOOR DRAIN With Hinged Strainer

Pipe Size A	B	E	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)
2"	6"	3¼"	5¾"	$ 6.00	$14.40	$ 36.00	$12.00	$21.60
3"	9"	5½"	6½"	12.00	28.80	72.00	22.80	41.80
4"	12"	6⅜"	7½"	24.00	57.60	144.00	44.20	81.80

Approx. Wt. Lbs. 2"—7, 3"—18, 4"—21.
I. P. S. outlet available.

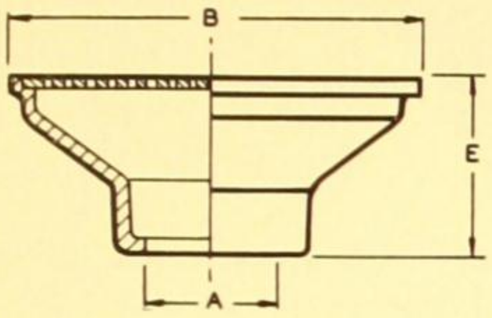


Spigot Outlet



Z-565

HEAVY GUTTER DRAIN — FIG. Z-575



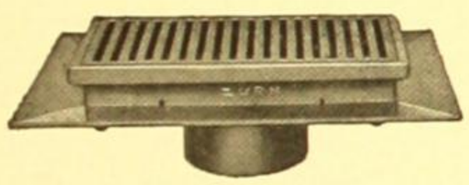
Z-575—Caulk Outlet

Pipe Size A	Length B	Width	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4″	13″	5½″	5¾″	$11.20	$18.40	$38.40	$20.80	$28.80	18
5-6″	15½″	7⅝″	5½″	22.40	37.40	87.40	39.70	46.60	30
3-4-5-6″	24⅛″	7⅛″	6″	44.80	67.20	94.00	68.80	72.80	42
Grate only							Chrome plated top		
12 x4½″				4.00	6.70	9.60	add $8.00		
14¼x6½″				5.60	9.60	16.00	add 9.20		
23 x6″				10.40	17.30	19.20	add 14.00		
Convex grate only									
12″x4½″				7.20	10.60	12.80			
14″x6½″				8.80	13.40	19.20			
23″x6″				16.00	24.00	26.40			

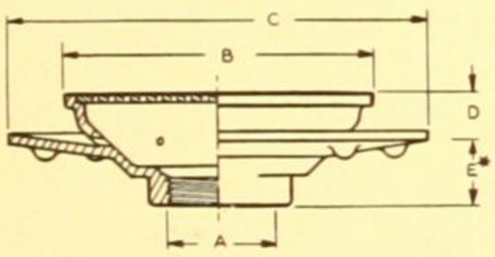
I. P. S. outlet available.

For narrow gutters in swimming pools and battery shower rooms, providing rapid drainage.

HEAVY GUTTER DRAIN With Seepage Pan — FIG. Z-580


Z-580

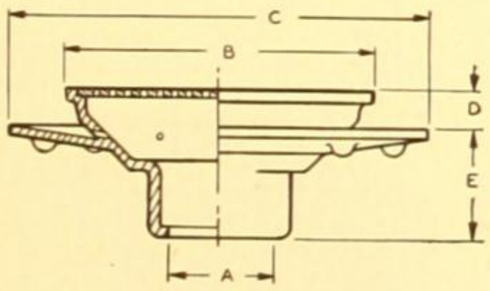
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4″	$16.00	$25.40	$49.60	$28.00	$38.40	31
5-6″	28.80	48.00	101.80	46.10	66.40	38
3-4-5-6″	54.40	75.80	128.00	78.70	102.70	55
Grate only				Chrome Plated Top		
12 x4½″	4.00	6.70	8.00	add $8.00		
14¼x6½″	5.60	9.60	16.00	add 10.20		
23 x6″	10.40	17.30	19.20	add 14.00		
Clamping collar add						
2-3-4″	5.00	7.20	9.60			
5-6″	6.00	10.80	16.00			
3-4-5-6″	12.00	18.00	22.00			



I.P.S. Outlet

FIG. Z-580 I. P. S.

Pipe Size A	Length of Top B	Width of Top	Body Length C	Body Width	D	E
2″	13″	5½″	17½″	10″	2″	2″
3″	13″	5½″	17½″	10″	2″	2″
4″	13″	5½″	17½″	10″	2″	2″
5″	15½″	7⅝″	19½″	12″	1⅝″	4″
6″	15½″	7⅝″	19½″	12″	1⅝″	4″
3″	24⅛″	7⅛″	28½″	11½″	2″	2¾″
4″	24⅛″	7⅛″	28½″	11½″	2″	2¾″
5″	24⅛″	7⅛″	28½″	11½″	2″	2¾″
6″	24⅛″	7⅛″	28½″	11½″	2″	2¾″



Caulk Outlet

FIG. Z-580 I. C.

Pipe Size A	Length of Top B	Width of Top	Body Length C	Body Width	D	E
2″	13″	5½″	17½″	10″	2″	3¾″
3″	13″	5½″	17½″	10″	2″	3½″
4″	13″	5½″	17½″	10″	2″	3½″
5″	15½″	7⅝″	19½″	12″	1⅝″	3⅞″
6″	15½″	7⅝″	19½″	12″	1⅝″	3⅞″
3″	24⅛″	7⅛″	28½″	11½″	2″	4″
4″	24⅛″	7⅛″	28½″	11½″	2″	4″
5″	24⅛″	7⅛″	28½″	11½″	2″	4″
6″	24⅛″	7⅛″	28½″	11½″	2″	4″

For same service as Z-575.

FIG. Z-585 GUTTER DRAIN With Hinged Grate and Seepage Pan

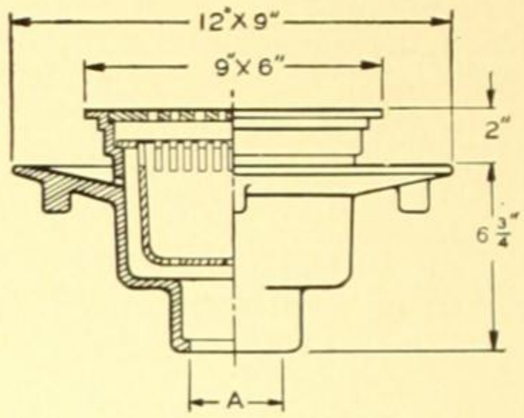
Z-585

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2-3-4″	$27.00	$50.40	$86.40	$37.50	$59.40
Clamp collar, add	3.00	4.00	6.00		

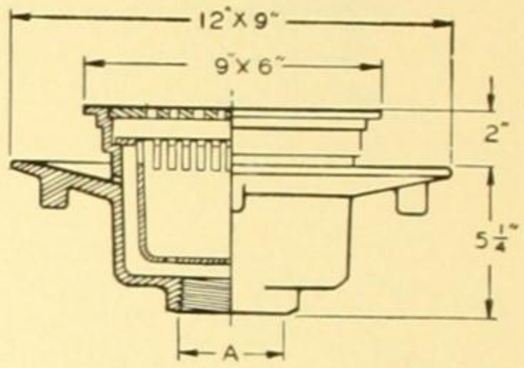
With loose strainer deduct $2.30

Approx. Wt. Lbs. 2-3-4″—30.

Practical rectangular drain with removable sediment bucket.



Z-585—Caulk Outlet



Z-585—I.P.S. Outlet

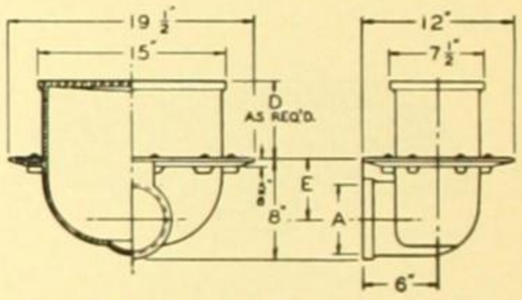
FIG. Z-589 GUTTER DRAIN

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4-5-6″	$66.00	$108.00	$208.00	75
Clamp collar, add	10.10	17.30	32.00	

Pipe Size A	E
4″	5 7/16″
5″	4 7/8″
6″	4 3/8″

Caulk outlet available.

Clamping facility for flashing if required.



Z-589—I.P.S. Outlet

FIG. Z-590 FLOOR DRAIN With Internal Trap, With Seepage Pan

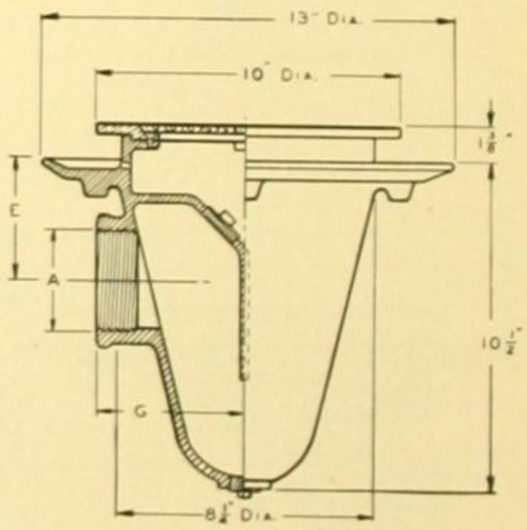
Pipe Size A	E	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	2 3/8″	4 3/4″	$21.00	$36.00	$69.10	35
3″	2 3/8″	4 3/4″	25.50	42.30	77.10	36
4″	2 5/8″	4 3/4″	31.50	51.30	85.10	37
5″	3 3/4″	5 1/4″	37.50	58.50	93.10	38
6″	3 3/4″	5 1/4″	43.50	65.70	102.70	39
Clamp collar add			3.00	4.50	5.60	

Pipe Size A	Bronze Rim and Strainer Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Chrome Top Add	W. M. Top Add
2″	$30.80	$47.70	$ 8.00	$10.40
3″	36.80	55.80	8.00	10.40
4″	43.50	65.70	8.00	10.40
5″	51.00	74.70	8.00	10.40
6″	57.00	81.90	8.00	10.40

Hinged strainer add $3.00

Caulk outlet available.

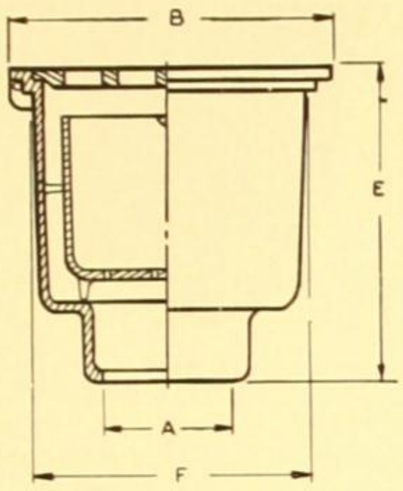
Provides large drainage capacity within limited space.



Z-590—I.P.S. Outlet

SPECIAL PURPOSE DRAINS . . . Pages 35 to 44

FLOOR DRAIN With Sediment Bucket — FIGS. Z-600 & Z-605



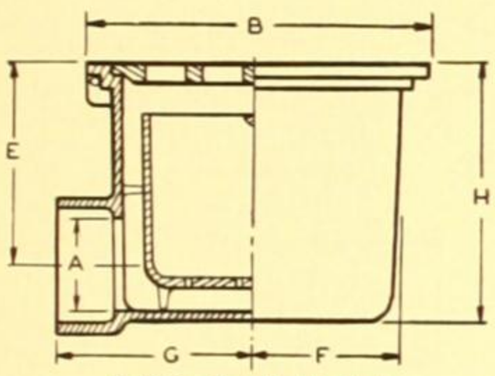
Z-600—Caulk Outlet

Z-600, Bottom Outlet

Pipe Size A	Top Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4″	9″x9″	$18.00	$30.20	$69.10	$31.20	$45.50	25
2-3-4″	12″x12½″	36.00	60.50	138.20	55.20	80.70	66
5-6″	12″x12½″	42.00	67.70	144.60	61.20	87.80	70
7″ grate only		3.20	5.80	11.20			
10″ grate only		5.20	9.20	19.20			
Small bucket only		5.60	8.70	19.20			
Large bucket only		8.80	14.40	28.80			
Small secondary strainer or dam only		1.60	2.90	4.00			
Large secondary strainer or dam only		2.40	3.80	4.80			
Hinged grate add		3.20	3.20	3.20			

Pipe Size A	B	E	F
2-3-4″	9″x9″	7½″	7″
2-6″	12″x12½″	12¾″	10¼″

I. P. S. outlet available.



Z-605—Caulk Outlet

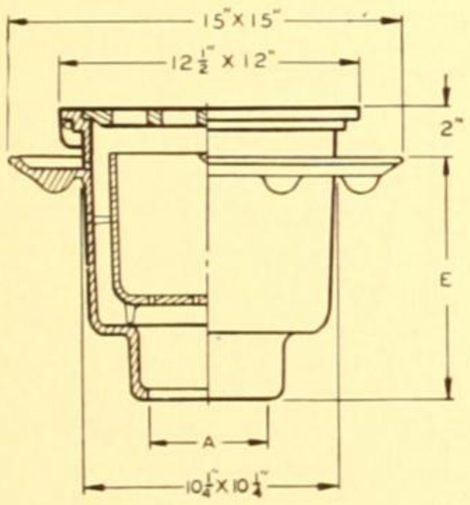
Z-605, Side Outlet, add to above prices 9″ x 9″ **$6.40** 12″ x 12½″ **$9.60.**

Pipe Size A	B	E	F	G	H	Approx. Wt. Lbs.
2″	9″x9″	3½″	3½″	5⅞″	5″	25
3″	9″x9″	3″	3½″	5⅞″	5″	25
4″	9″x9″	3¼″	3½″	5⅞″	5″	25
2″	12″x12½″	8″	5 3/16″	7⅞″	10¼″	71
3″	12″x12½″	7¾″	5 3/16″	7⅞″	10¼″	71
4″	12″x12½″	7½″	5 3/16″	7⅞″	10¼″	71
5″	12″x12½″	7¼″	5 3/16″	7⅞″	10¼″	71
6″	12″x12½″	7″	5 3/16″	7⅞″	10¼″	71

I.P. S. outlet available.

For waste water containing sediment.

Service Station DRAIN, Heavy Type — FIGS. Z-610 & Z-615



Z-610—Caulk Outlet

Z-610 Bottom Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-3-4″	$39.00	$65.70	$124.80	$55.50	$83.20	75
5-6″	45.00	72.90	131.20	61.50	90.40	78
Clamping collar	3.20	4.80	9.60			
Grate	4.80	8.60	17.60			
Bucket	9.60	16.10	28.80			
Secondary strainer	2.40	3.80	4.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			

Add to (CB) and (GB) Lists for

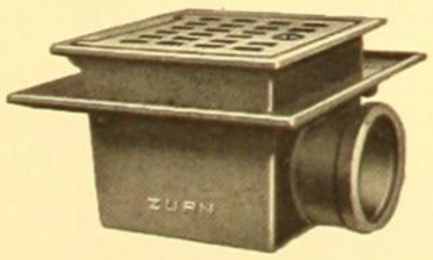
C. P.	W. M.
$12.80	$16.00

Add for B. W. Valve

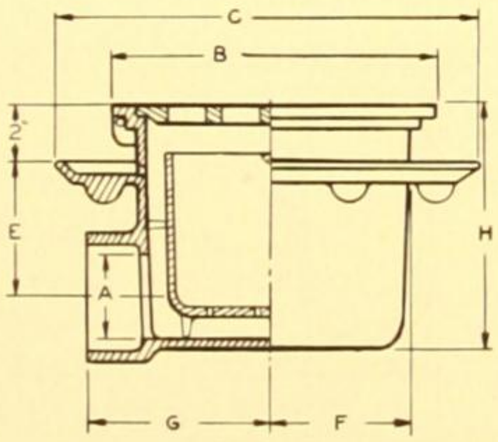
Coated (DC)	Galv. (G)	All Bronze (BR)
$12.00	$16.30	$19.50

Pipe Size A	E
2-6″	10⅞″

I. P. S. outlet available.



Z-615



Caulk Outlet

Z-615 Side Outlet—Add to above prices **$9.60.**

Pipe Size A	B	C	E	F	G	H	Approx. Wt. Lbs.
2″	12″x12½″	15″ sq.	5⅞″	5⅛″	8¼″	10¼″	81
3″	12″x12½″	15″ sq.	5⅝″	5⅛″	8¼″	10¼″	81
4″	12″x12½″	15″ sq.	5⅜″	5⅛″	8¼″	10¼″	81
5″	12″x12½″	15″ sq.	5⅛″	5⅛″	8¼″	10¼″	81
6″	12″x12½″	15″ sq.	4⅞″	5½″	8¼″	10¼″	81

I. P. S. outlet available.

For waste water containing sediment, and where seepage control or floor anchorage is required.

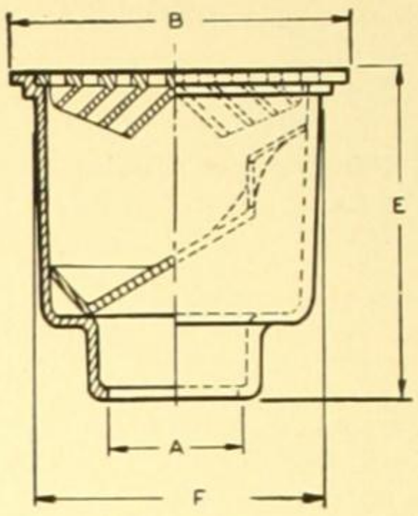
FIG. Z-616 School and Playground DRAIN, Heavy Type, With Deflector Grate and Bottom Outlet

Pipe Size A	B	E	F	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	8½"x 8½"	9"	7" sq.	$21.60	$38.30	$ 72.00
4-5-6"	12" x12½"	13"	10⅜" sq.	36.00	60.30	115.20
7" "deflector" grate only				8.00	14.40	24.80
10" "deflector" grate only				12.00	19.20	48.00
Small intercepting dam strainer only				2.40	4.80	6.40
Large intercepting dam strainer only				4.00	6.70	8.80

I. P. S. outlet available.

Approx. Wt. Lbs. 2"-3"-4"—24, 4"-5"-6"—66.

For schools, playgrounds, asylums and other institutions to prevent drain clogging by injection of sticks and other objects through the strainer.



Caulk Outlet

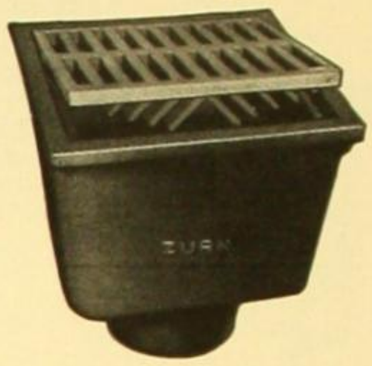
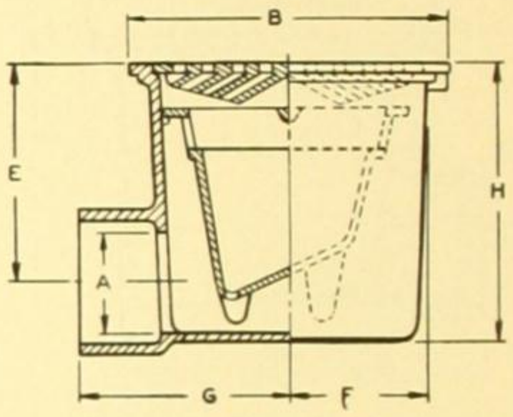

Z-616

FIG. Z-617 Court or Area DRAIN, Heavy Type, With Deflector Grate and Side Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.	Pipe Size A	B	E	F	G	H
2-3-4"	$25.20	$44.30	$ 80.00	24	2"	8½"x 8½"	5¼"	3 15/16"	8"	6½"
4-5-6"	42.30	75.60	172.80	68	3"	8½"x 8½"	4 11/16"	3 15/16"	9 13/16"	6½"
Small seepage pan add	6.40	10.60	22.40		4"	8½"x 8½"	4 3/16"	3 15/16"	10 3/16"	6½"
Large seepage pan add	8.00	13.40	28.80		4"	12" x12½"	7½"	5 3/16"	7⅞"	10¼"
7" "deflector" grate only	8.00	14.40	24.80		5"	12" x12½"	7¼"	5 3/16"	7⅞"	10¼"
10" "deflector" grate only	11.00	19.20	48.00		6"	12" x12½"	7"	5 3/16"	7⅞"	10¼"
Small sediment bucket only	8.00	11.50	22.40							
Large sediment bucket only	11.20	15.40	30.40							

I. P. S. outlet available.

For same service as Z-616.



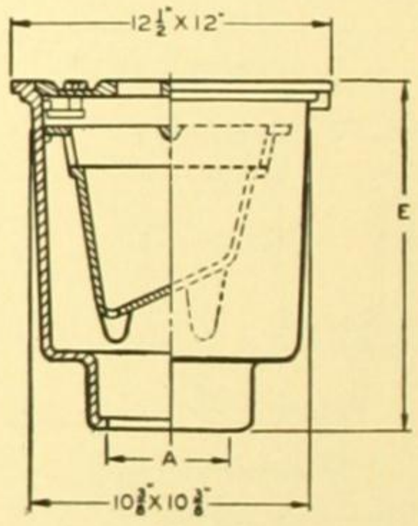
Z-617—Caulk Outlet

FIG. Z-620 Court or Area DRAIN, Heavy Type, With Grate Locking Device, Bottom Outlet

Pipe Size A	E	Coated Body	Galv. Body	Approx. Wt. Lbs.
2-3-4"	12¾"	$36.00	$60.50	66
5-6"	13"	40.50	65.90	68
Dirt arrestor in lieu of bucket—deduct		2.00	4.80	
Malleable bucket only		14.00	24.00	
Malleable grate only		12.00	21.60	

I. P. S. outlet available.

Provided with non-slip cover.

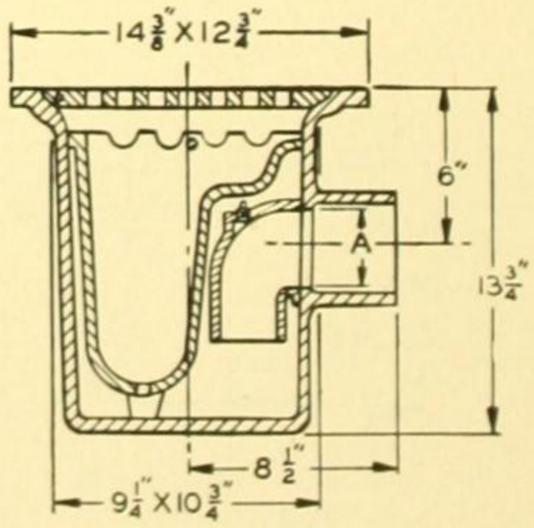


Z-620—Caulk Outlet

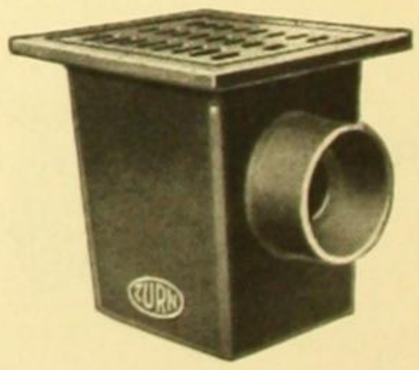
FIG. Z-630 Boiler Room Heavy Duty DRAIN, With Internal Trap and Sediment Bucket, Side Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-6"	$60.00	$100.80	$230.40	$93.00	$137.70	108

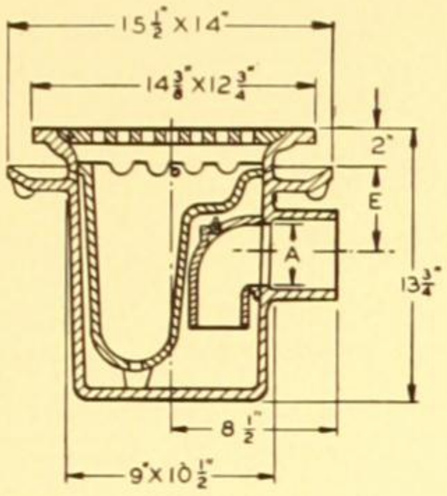
Hinged grate, add $3.00



Hub Outlet


Z-630

Boiler Room Heavy Duty DRAIN, With Seepage Pan and Sediment Bucket — FIG. Z-635



Z-635—Caulk Outlet

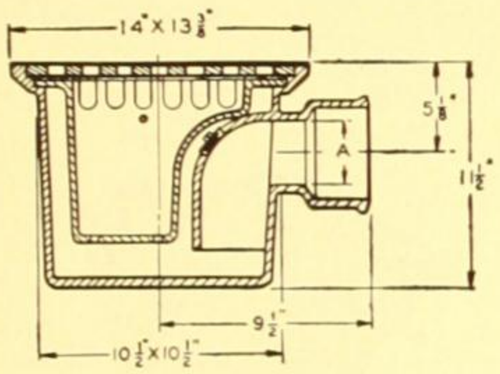
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2-6"	$69.00	$113.00	$248.30	$102.80	$153.50
Clamping collar add	3.00	6.30	9.60		
Grate	7.50	11.70	27.20		
Bucket	12.00	19.80	43.20		

Add for hinged grate $3.00

Pipe Size A	E	Approx. Wt. Lbs.
2-3-4"	4"	120
5"	4½"	125
6"	5"	126

I. P. S. outlet available.

Industrial Heavy Duty DRAIN, With Integral Trap, Sediment Bucket and Side Outlet — FIG. Z-645



Z-645—Caulk Outlet

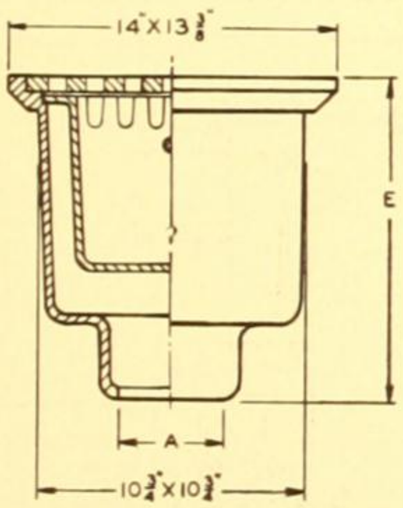
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-6"	$45.60	$76.20	$149.80	$80.80	$114.60	113
Grate only	8.50	12.70	23.20	23.20	23.20	
Bucket only	12.00	21.00	48.00	12.00	21.10	
Hinged grate add	3.20	3.20	3.20	3.20	3.20	
With seepage pan add	9.60	14.40		9.60	14.40	
With clamping collar add	8.00	10.00		4.80	8.60	

Add to (CB) and (GB) Lists for

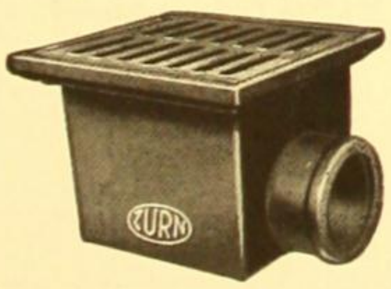
Pipe Size A	C. P.	W. M.
2-6"	$17.60	$22.40

Pipe Size A	E
2-3"	5⅛"
4"	5⅛"
5"	5⅛"
6"	5⅛"

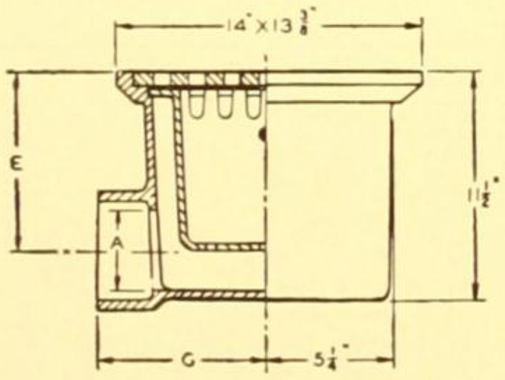
Railroad or Track DRAIN, With Multi-Connections, and Sediment Bucket — FIG. Z-650



Caulk Outlet



Z-650



Side Caulk Outlet

Z-650 Bottom Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2-6"	$39.80	$67.90	$146.60	$75.80	$107.50	100
Grate	7.50	12.60	25.60			
Bucket	11.30	19.80	48.00			
Hinged grate add	3.00	3.00	3.00			
Seepage pan	9.60	14.40				
Clamping collar	8.00	10.00				

Pipe Size A	E
2-6"	14"

I. P. S. outlet available.

Z-650 Side Outlet—Add to above prices, **$9.60**

Pipe Size A	E	G	Approx. Wt. Lbs.
2"	9⅞"	7¾"	98
3"	9¼"	8"	100
4"	8¾"	8¼"	102
5"	8¼"	8¼"	103
6"	7¾"	8¼"	104

I. P. S. outlet available.

For station trackways, driveways and floor areas where drains are connected in a series and not trapped individually.

FIG. Z-655 Laundry Or Dairy DRAIN With Seepage Pan and Sediment Bucket, Side Outlet

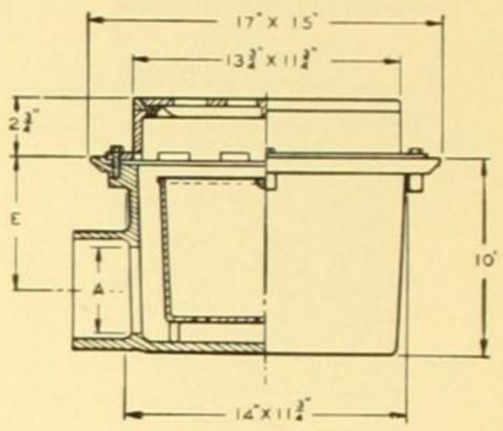
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2-6"	$67.40	$110.20	$214.60	$122.90	$165.70
Grate	11.70	19.30	34.60	Hinged grate add	
Bucket	13.20	22.10	42.20	$4.50	

Add for B. W. Valve 2"—$6.00; 3"—$9.00; 4"—$12.00

Pipe Size A	E	Approx. Wt. Lbs.
2-3-4"	7¾"	115
5"	7"	116
6"	6½"	118

Bottom outlet or I.P.S. outlet available.

For laundries, dairies and other floor areas where large capacity and seepage control or floor anchorage is required.



Z-655—Caulk Outlet

FIG. Z-660 Factory DRAIN
With Flashing Provision For Variable Slabs, Bottom Outlet

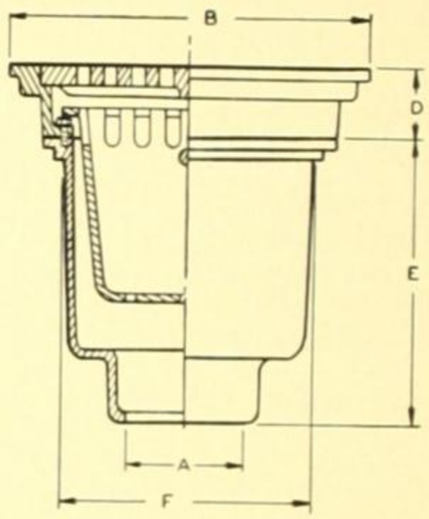
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2-3-4"	$40.80	$ 68.40	$101.80	$58.80	$ 84.90
4-5-6"	72.00	121.00	257.30	99.00	136.80
10" grate only	8.00	13.40	25.00	Hinged Grate add $4.00	
13" grate only	14.00	22.80	30.00		
Small bucket only	10.00	16.80	30.00	Locking device add $2.00	
Large bucket only	13.00	21.60	54.00		
Small dam only	3.00	6.00	10.00		
Large dam only	6.00	10.20	16.00	Side outlet add $9.60	

Approx. Wt. Lbs. 2-3-4"—49, 4-5-6"—102.

Pipe Size A	B	D	E	F
2-3-4"	12"x12½"	3"	7½"	7" sq.
4-5-6"	16" sq.	3½"	10¾"	10½" sq.

I. P. S. outlet available.

For extra heavy traffic loads, rim and grate can be furnished in steel.



Caulk Outlet

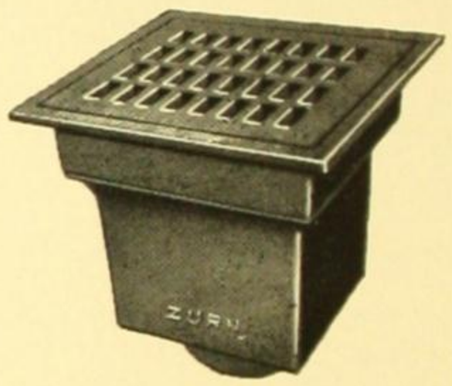
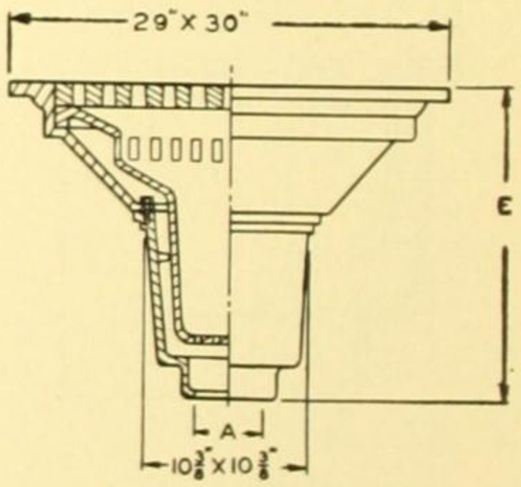

Z-660

FIG. Z-661 Highway Garage DRAIN With Sludge Bucket and Overflow Provision, Bottom Outlet

Pipe Size A	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2-3-4-5-6"	21½"	$240.00	$432.00	300
Top grate only		72.00	129.60	
Sludge bucket only		48.00	86.40	

I. P. S. outlet available.

For highway or public garages where heavy truck, tractor or snow-removal equipment is used. Grate will withstand shock load.



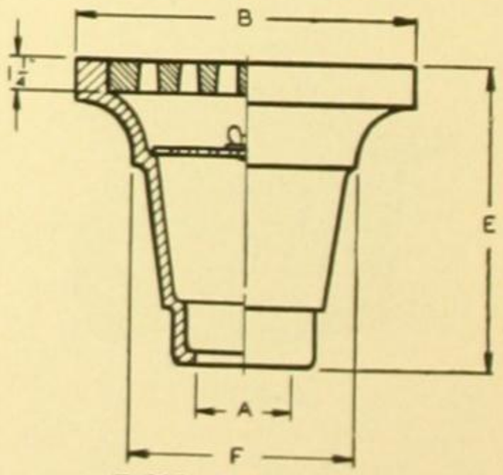
Z-661—Caulk Outlet

FIG. Z-662 Heavy Duty Garage DRAIN With Secondary Strainer

Pipe Size A	Coated (DC)	Galv. (G)	Pipe Size A	B	E	F	Approx. Wt. Lbs.
2-3-4"	$37.20	$62.60	2"	12⅜" sq.	11½"	7⅞" sq.	59
Grate only	15.00	25.20	3"	12⅜" sq.	11⅛"	7⅞" sq.	
Secondary strainer only	1.50	2.70	4"	12⅜" sq.	10¾"	7⅞" sq.	

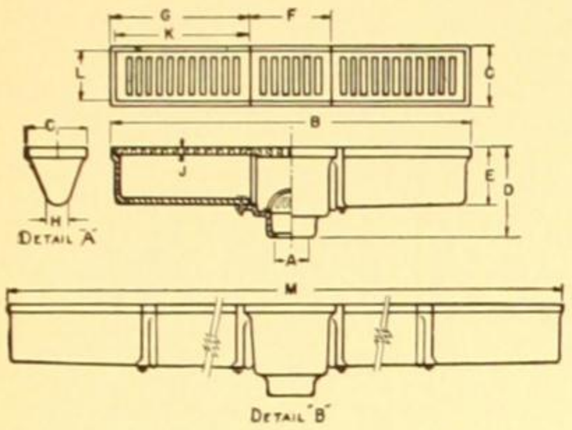
I. P. S. outlet available.

Extra heavy top grate will carry heaviest loads.



Z-662—Caulk Outlet

Continuous Gutter DRAIN With Secondary Strainer FIG. Z-664



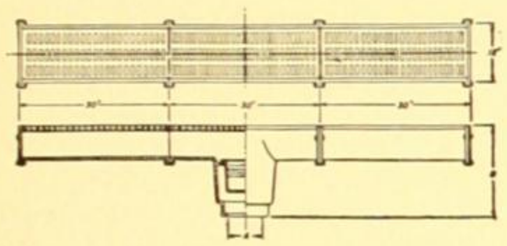
Z-664—Caulk Outlet

Pipe Size A	B	C	D	E	F	G	H	J	K	L	M Max.	Drain Only "F" Dimension Coated (DC)
2"-3"-4"	5' 8"	6"	9⅛"	5¾"	8"	30"	3⅜"	⅞"	29⅝"	5⅛"	10' 8"	$37.50
For each foot in addition to drain body ("F" Dimension)												Add 15.00

Detail "A" above—trench body contour; detail "B"—method of joining additional trench sections.
Approx. Wt. Lbs., Drain with grate ("F" Dimension)—24, trench with grate per foot—35.

Very desirable for use with stairs, ramps or any drainage need in gutters or trenches. Extendable to longer than minimum shown, in units of 30" per section. Complete assembly made at factory ready for job installation.

Ramp, Deck And Pavement DRAIN With Trench FIG. Z-665

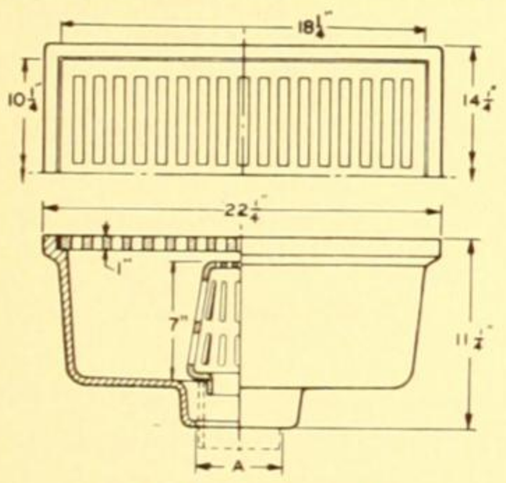

Z-665—Caulk Outlet

Pipe Size A	B	Length of Drain	Cast Iron Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
4"-5"-6"	10⅝"	2½ ft.	$103.20	$142.50	190
4"-5"-6"	10⅝"	5 ft.	158.20	222.50	291
4"-5"-6"	10⅝"	7½ ft.	213.20	302.50	536
4"-5"-6"	10⅝"	10 ft.	268.20	382.50	580
4"-5"-6"	10⅝"	12½ ft.	323.20	462.50	633
Less Sediment bucket, deduct			6.60	10.40	

I. P. S. outlet available.

Interlocking trench and drain assemblies made to any length required. Ample drainage pitch provided.

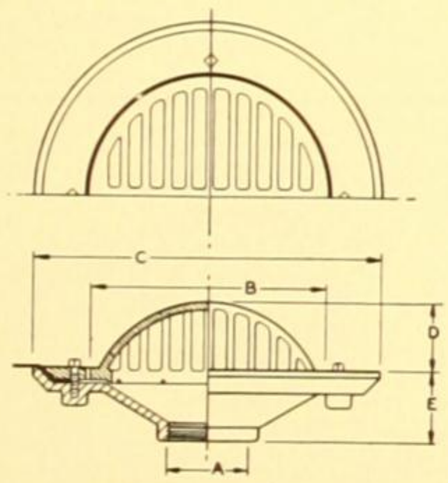
Heavy Duty DRAIN FIG. Z-668

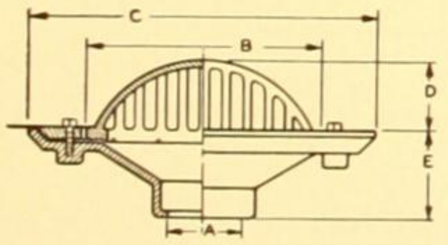

Z-668—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
4"	$82.50	$145.20	240
Add for seepage pan	11.30	16.20	
Add for clamping collar	19.50	25.20	
Grate only	12.00	20.70	

Heavy duty drain for general utility. Removable interior strainer protects outlet against heavy solids.

Sub Surface DRAIN FIG. Z-669


Z-669—I.P.S. Outlet


Z-669—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	All Bronze (BR)
4"	$49.00	$73.80	$83.30	$108.90	$140.00
5"	50.00	75.60	84.00	109.80	141.60
6"	51.00	77.40	85.50	111.60	144.80
8"	52.50	79.20	86.30	113.40	148.80
Less clamping collar, deduct	4.80	6.80	4.80	6.80	11.20

Z-669 I. P. S.

Pipe Size A	B-Dia.	C	D	E	Approx. Wt. Lbs.
4"	15"	20½"	4½"	3½"	34
5"	15"	20½"	4½"	3½"	35
6"	15"	20½"	4½"	3½"	37
8"	15"	20½"	4½"	3½"	39

Z-669 Inside Caulk Connection

Pipe Size A	B-Dia.	C	D	E	Approx. Wt. Lbs.
4"	15"	20½"	4½"	4⅜"	36
5"	15"	20½"	4½"	4⅜"	37
6"	15"	20½"	4½"	4⅜"	39
8"	15"	20½"	4½"	4⅞"	41

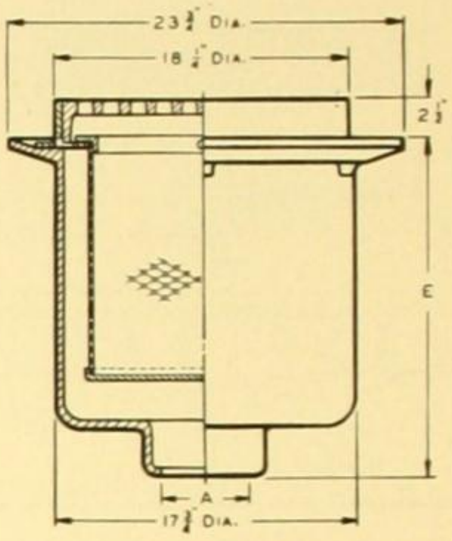
Semi-dome type strainer provides excess drainage ratio of strainer to outlet.

FIG. Z-675 Garbage Can Washing Floor DRAIN, With Mesh Basket

Pipe Size A	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2-6"	20¾"	$246.00	$406.80	240

Deduct when galv. wire basket is required $10.50
Deduct when cast iron bucket is required $26.70
I. P. S. Bottom or Side Outlets and Caulk Side Outlets available.

Can be used with sediment bucket as extra large sump. Flange type strainer. 16 mesh basket.



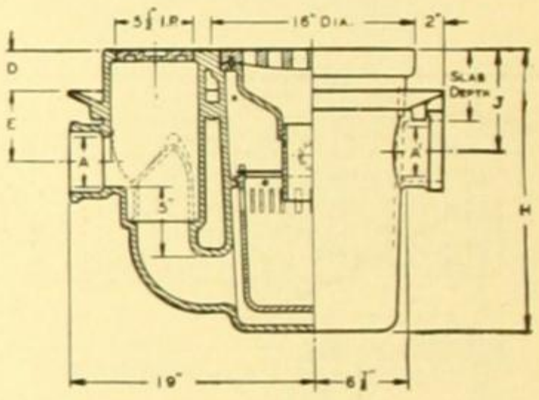
Z-675—Caulk Outlet

FIG. Z-690 Garage DRAIN Extra Heavy Duty, With Gas Seal Cone, Sediment Bucket, Trap and Cleanout

Pipe Size A & A'	D	E	H	J	Slab Depth	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
3-4"	2½"	6½"	22¾"	6½"	4"	$207.60	$345.90	$252.60	$399.90	384
3-4"	4½"	6½"	24¾"	8½"	6"	207.60	345.90	252.60	399.90	390
3-4"	6½"	6½"	26¾"	10½"	8"	219.60	365.70	264.60	419.70	396
3-4"	8½"	6½"	28¾"	12½"	10"	231.60	385.60	276.60	439.60	402
3-4"	10½"	6½"	30¾"	14½"	12"	243.60	405.30	288.60	459.30	410
Clamping collar add						20.00	34.80			
Grate only						18.00	30.00	36.00	36.00	
Bucket only						30.40	50.80			
Gas seal cone only						14.40	24.20			
Less seepage pan, deduct						33.00	48.00			
Hinged grate add						10.00	10.00	10.00	10.00	

Back water valve add $16.00
I. P. S. outlet available.

Will carry load of heaviest trucks. For floor areas where waste water contains gasoline, oil and sediment.



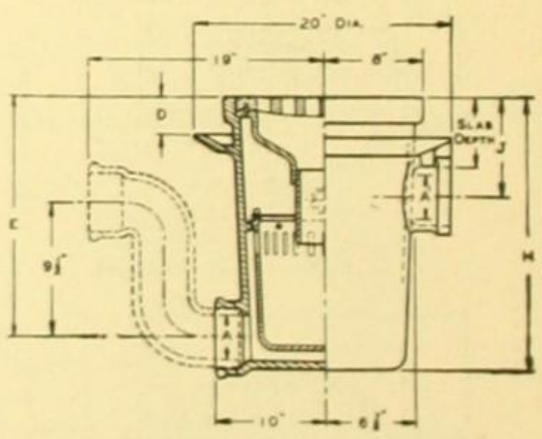
Z-690—Caulk Outlet

FIG. Z-691 Oil And Gas Heavy Duty Garage DRAIN

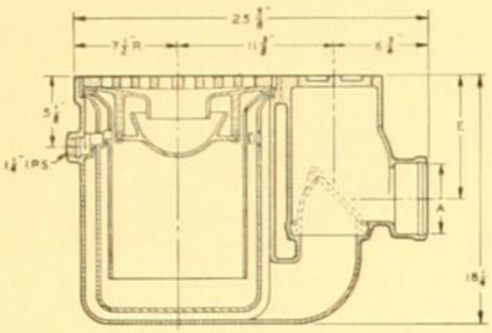
Pipe Size A & A'	D	E	H	J	Slab Depth	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
3-4"	2⅝"	18½"	22¾"	6½"	4"	$151.20	$221.80	$187.20	$265.00	303
3-4"	4⅝"	20½"	24¾"	8½"	6"	162.00	237.20	198.40	281.30	308
3-4"	6⅝"	22½"	26¾"	10½"	8"	172.80	253.50	208.80	297.60	313
3-4"	8⅝"	24½"	28¾"	12½"	10"	171.80	252.90	205.50	293.40	318
3-4"	10⅝"	26½"	30¾"	14½"	12"	183.20	269.80	219.20	313.00	323
Clamping collar add						9.10	12.80			
Trap connection add						16.00	26.40			
Grate only						6.00	9.60	18.00	18.00	
Bucket only						30.40	50.80			
Gas seal cone only						14.40	24.20			
Less seepage pan, deduct						33.00	48.00			

I. P. S. outlet available.

Will carry load of heaviest trucks. For floor areas where waste water contains gasoline, oil and sediment.



Z-691—Caulk Outlet



Caulk Outlet
Shows Oil Drawoff—1¼" I.P.S.

Z-697
Patented

Volatile Liquids Intercepting DRAIN FIG. Z-697

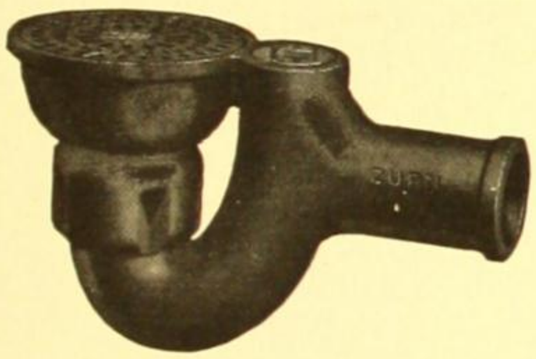
Pipe Size A	E	Coated (DC)	Approx. Wt. Lbs.
3"	9"	$285.00	400
4"	9"	285.00	400
Add for B.W. Valve, if required		22.50	

Volatile Liquids Intercepting DRAIN With Oil Drawoff FIG. Z-697-1

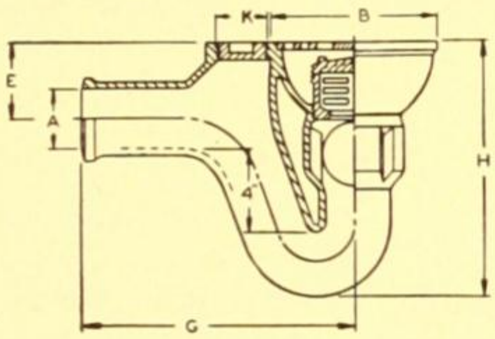
Add to Z-697 price $45.00

Retention Capacities—550 Cu. In. or approximately 2½ Gal.

Intercepts, separates and recovers oils, gasoline, etc. from waste water. Provides engineered protection against fires, explosions and water pollution. Specially designed for installations where volatile fluids such as gasoline, oil, naphtha, etc., having a lower specific gravity than water, are apt to be discharged into drainage lines. Volatile liquids safety seal in a chamber directly beneath the heavy grate prevents the possibility of explosion and limits the possibility of ignition to a small area in the center of the drain where a flame can be extinguished easily.



Z-700



Caulk Outlet

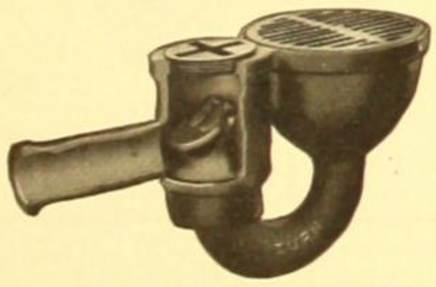
Subsurface Backwater DRAIN, With Integral Trap And Floor Level Cleanout FIG. Z-700

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Approx. Wt. Lbs.
2"	$32.30	$49.00	$ 93.90	$45.00	$63.00	26
3"	44.30	67.00	125.60	54.80	78.30	36
4"	56.40	84.30	161.30	69.80	99.90	39

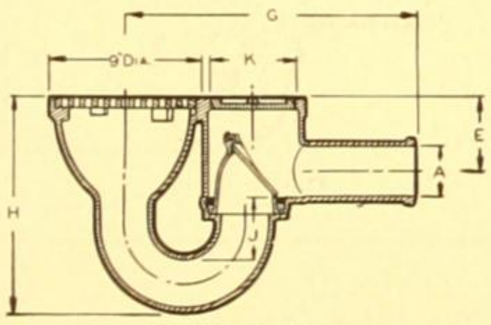
Hinged strainer add $3.00
Less cleanout deduct $1.50 all sizes
Less float valve deduct 2"—$6.00; 3"—$9.00; 4"—$12.00

Pipe Size A	B-Dia.	E	G	H	K
2"	8¼"	3¼"	11⅞"	10⅝"	1½"
3"	8⅜"	3⅞"	13 9/16"	12¾"	2½"
4"	12"	4⅜"	15½"	15"	3½"

Vertical, secondary strainer provides float seat; by reversing this strainer, it serves as a solid plug to close the line entirely, as protection of line during installation, and as positive closure against excessive backwater.



Z-730



Caulk Outlet

FLOOR DRAIN And TRAP, With Backwater Flap Valve FIG. Z-730

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2"	$32.30	$48.90	$ 93.90	$45.00	$63.00	36
3"	44.30	66.90	125.60	54.80	78.30	54
4"	56.40	85.40	161.20	69.80	99.90	79
Add for auxiliary inlet	8.00	10.60	11.20			

Pipe Size A	E	G	H	J	K
2"	3¾"	14⅞"	11"	4"	3½"
3"	4⅜"	17⅛"	13"	4"	4½"
4"	4¾"	19½"	16"	5"	5½"

Chrome P. top add	2"	$7.70
	3"	8.00
	4"	8.80
If furnished without B. W. Valve, deduct	2"	$6.40
	3"	9.60
	4"	12.80

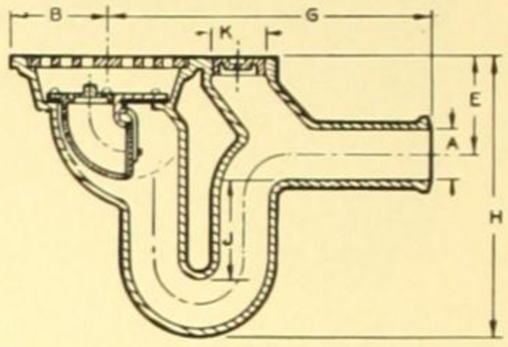
Combined drain and deep seal trap. Extra heavy grate. Floor level access cleanout.

FIG. Z-731 Combined DRAIN and Integral, Deep Seal TRAP With B. W. Valve And Floor Level Cleanout

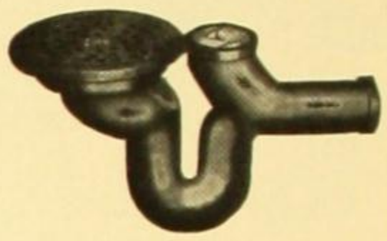
Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2"	$22.50	$30.60	$31.50	$ 40.50	32
3"	40.50	55.80	56.30	73.80	50
4"	63.00	89.10	79.50	104.40	80

Less B.W.V. deduct 2"—$11.20; 3"—$14.40; 4"—$23.20

Pipe Size A	B	E	G	H	J	K
2"	3 15/16"	3 7/8"	13 1/16"	11 1/4"	4"	2" I.P.S.
3"	5 1/8"	5"	17"	13 1/2"	4"	3" I.P.S.
4"	6"	5 7/8"	18 1/2"	16 1/4"	4"	4" I.P.S.



Caulk Outlet


Z-731

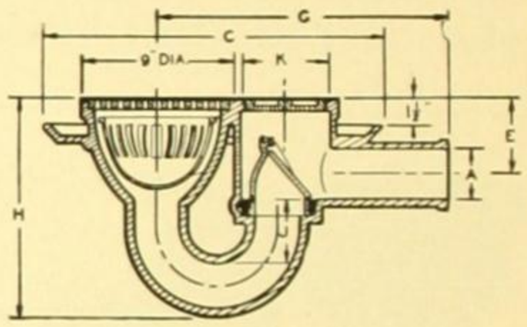
Swing check valve provided on house side of drain.

FIG. Z-735 FLOOR DRAIN And TRAP With Sediment Bucket And Backwater Valve

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Approx. Wt. Lbs.
2"	$ 53.60	$ 82.20	$132.30	$ 67.20	$ 97.20	65
3"	69.60	105.80	167.80	80.80	117.90	90
4"	85.80	131.70	218.90	101.60	149.20	105
C. P. Top, add 2"	$7.70					
3"	8.00					
4"	8.80					
Clamping collar add	4.00	6.00	12.00			
Deduct for bucket	6.40	11.50	19.20			

If Less B.W. Valve, Deduct 2"—$6.40; 3"—$9.60; 4"—$12.80

Pipe Size A	C	E	G	H	J	K
2"	18"	3 3/4"	14 7/8"	11"	4"	3 1/2"
3"	19 7/8"	4 1/4"	17 1/8"	13"	4"	4 1/2"
4"	19 7/8"	4 1/4"	17 1/8"	13"	4"	4 1/2"



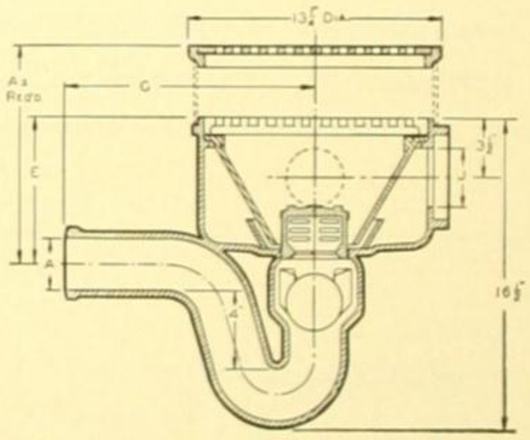
Z-735

Combined drain and deep seal trap. Extra heavy grate. Floor level access cleanout.

FIG. Z-750 Basement And Foundation DRAIN With Integral Trap And Backwater Valve

Pipe Size A	E	G	J	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
3"	7 3/4"	13 5/8"	4"	$54.30	$96.90	$119.00	$68.10	$108.00
4"	8"	13 5/8"	4"	54.30	96.90	119.00	68.10	108.00
Less extension provision, deduct						4.70		
Less float valve, deduct						12.00		
Additional drain tile inlet, add						1.50		

Approx. Wt. Lbs. 3"—80, 4"—83.



Caulk Outlet

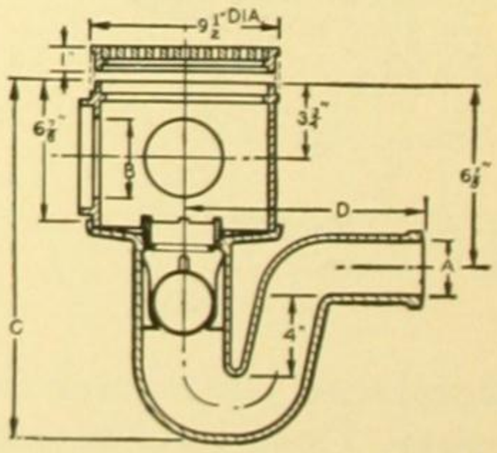
Z-750

Tile pipe connection provides for subsoil drainage.

FIG. Z-752 Basement Subsoil DRAIN With Backwater Valve and Round Float

Pipe Size A	B	C	D	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3"	4"	17 3/4"	11 3/4"	$30.00	$56.20	$40.50	$67.50	$ 8.00	80
4"	4"	19 3/8"	12 3/4"	36.00	64.40	49.40	79.00	8.80	82

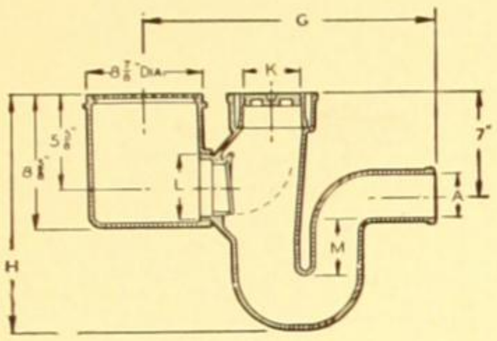
Add for B.W. Valve on tile inlets—$3.00
Hinged strainer add—$3.00
Deduct for B.W. Valve 3"—$9.00; 4"—$12.00
Available with brass swing check backwater valve in place of float valve.



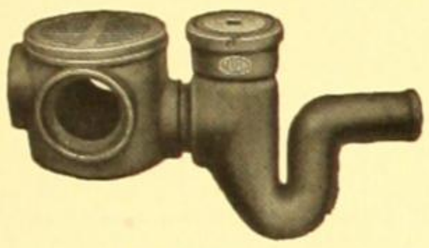
Z-752

Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension.

FLOOR DRAIN With Integral Trap, B. W. Valve and Floor Level Cleanout FIG. Z-754, Z-754-1



Z-754


Z-754-1

Z-754

Pipe Size A	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3″	$44.30	$66.90	$54.80	$78.30	$ 8.00	82
4″	56.40	85.40	69.80	99.90	8.80	84
Add for bucket—3″	5.40	8.30				
—4″	6.80	11.40				
Strainer only	4.40	7.90				

Hinged strainer add $3.00
Deduct for B.W. Valve 3″—$9.60; 4″—$12.80

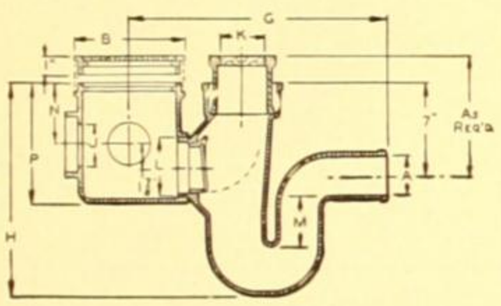
Pipe Size A	G	H	K	L	M
3″	20¾″	15½″	3½″	4″	4″
4″	22″	16⅝″	4½″	5″	4¾″

Z-754-1

	Coated (DC)	Galv. (G)
Add for Tile Inlet	$7.50	$9.90

Z-754, Z-754-1 Furnished with solid cover when specified.

Adjustable Combination Basement and Subsoil DRAIN With Backwater Valve and Floor Level Cleanout FIG. Z-755



Z-755

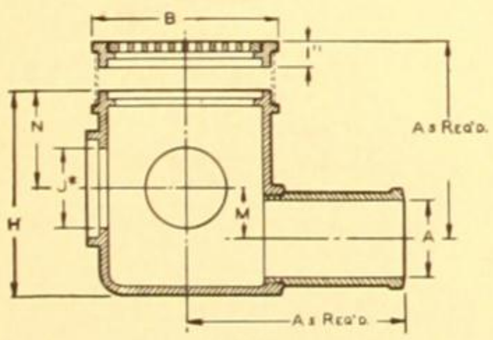
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3″	$49.00	$85.60	$181.30	$61.00	$ 97.60	$8.00	77
4″	53.00	92.00	196.10	65.00	104.00	8.80	79
Strainer only	4.40	7.90					

Hinged strainer add $3.00
Deduct for B.W. Valve 3″—$9.60; 4″—$12.80

Pipe Size A	B-Dia.	G	H		K	L	M	N	P
3″	9½″	20¾″	15½″	4″	3½″	4″	4″	3¾″	8½″
4″	9½″	22″	16⅝″	4″	4½″	5″	4¾″	3¾″	8½″

Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension. Furnished with solid cover when specified.

Adjustable Combination Basement and Subsoil DRAIN FIG. Z-755-2



Z-755-2

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Polished Bronze Top Coated (CB)	Polished Bronze Top Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3″	$16.50	$30.30	$79.20	$31.80	$48.40	$8.00	43
4″	22.00	40.40	88.00	34.00	52.40	8.80	44

Pipe Size A	B-Dia.	H	J	M	N
3″	9½″	8½″	4″	1⅞″	3¾″
4″	9½″	8½″	4″	1⅞″	3¾″

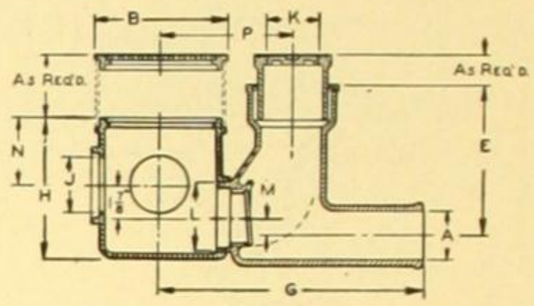
Tile pipe connections provide for subsoil drainage. Sheet metal extension piece cut to proper length permits location of strainer and frame at required level. Furnished with solid cover when specified.

FIG. Z-756 Adjustable Combination Basement and Subsoil DRAIN With Tile Inlets and Backwater Valve

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Polished Bronze Top Coated (CB)	Polished Bronze Top Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3"	$30.50	$51.70	$128.80	$42.80	$63.80	$8.00	70
4"	36.00	64.50	166.40	49.50	78.00	8.80	75

Deduct for B. W. Valve 3"—$9.60; 4"—$12.80

Pipe Size A	B	G	H	J	K	L	M	N	P
3"	9½"	18⅜"	8½"	4"	4½"	5"	⅞"	3¾"	9¾"
4"	9½"	18⅜"	8½"	4"	4½"	5"	⅞"	3¾"	9¾"



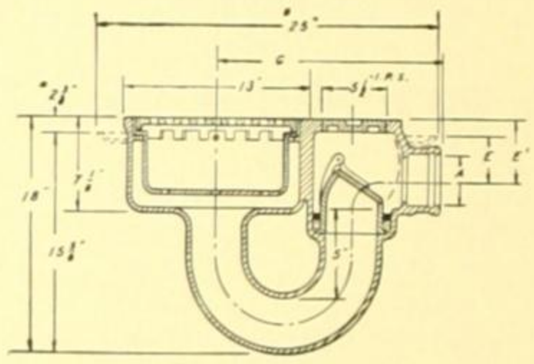
Z-756

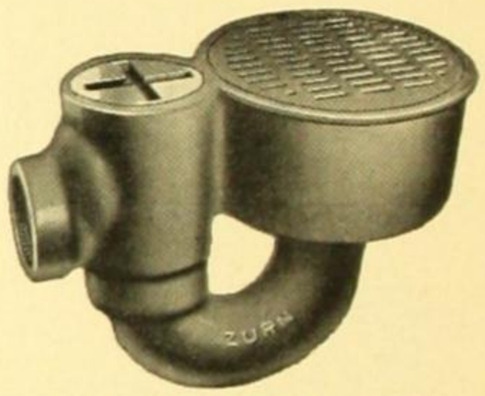
Same service as Z-755-2, but with backwater valve and adjustable floor level cleanout. Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension.

FIG. Z-760 Superservice Boiler House DRAIN and Trap With Backwater Valve and Sediment Bucket

Pipe Size A	E'	E	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
2"	6⅛"	3¾"	16½"	$61.10	$98.80	$213.60	$80.30	$119.00
3"	6⅛"	3¾"	16½"	68.40	109.10	229.90	87.60	129.20
4"	6⅛"	3¾"	16½"	80.10	126.40	260.20	99.30	146.50
Add for seepage pan				25.60	38.40	56.00	25.60	38.40
Add for clamping collar				6.00	10.80	16.00	6.00	10.80

Hinged grate add $3.20
Less backwater valve, deduct 2"—$6.40; 3"—$9.60; 4"—$12.80
Approx. Wt. Lbs. 2"—109, 3"—110, 4"—112.


Hub Outlet


Z-760
I.P.S. Outlet

For all heavy duty requirements. Regularly furnished with outlet for I.P.S. connection.

FIGS. Z-798, 798A, 798B Industrial Catch Basin Frames and COVERS

Z-798—Solid Cover

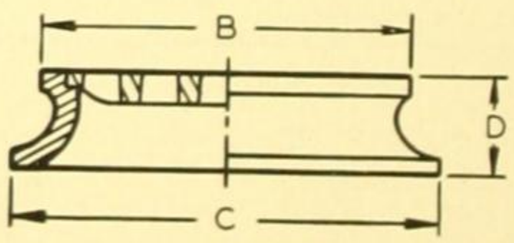
B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12⅞"	14"	3"	$23.60	$ 56.70	24
18"	21"	5⅛"	56.30	135.00	91
24"	27"	5"	85.50	205.20	218

Z-798A—Grate Cover

B-Dia.	C	D			
12⅞"	14"	3"	$22.50	$ 54.00	20
18" heavy	21"	5⅛"	49.50	118.80	85
18" double duty	21"	5⅛"	61.90	138.50	175
24" heavy	27"	5"	64.10	153.90	137
24" extra heavy	27"	5"	86.50	206.90	227

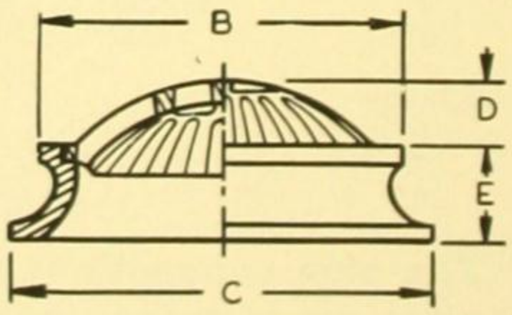
Z-798B—Convex Cover

B-Dia.	C	D	E			
12⅞"	14"	3"	5"	$36.00	$ 85.40	22
18"	21"	5⅛"	5"	57.40	137.70	89
24"	27"	5"	5"	74.30	178.20	140

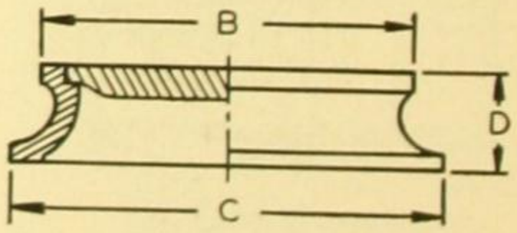


Z-798A

Z-798A



Z-798B



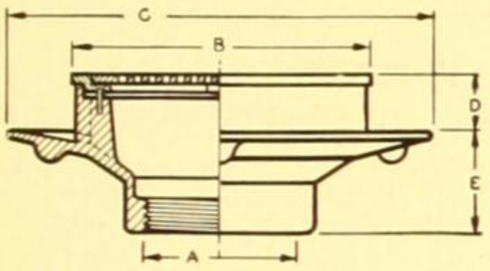
Z-798

For general heavy industrial usage. Will not loosen from cement.

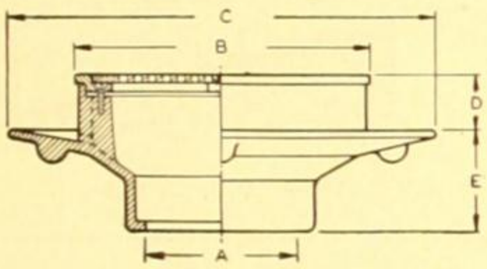
SWIMMING POOL DRAINS AND ACCESSORIES . . . Pages 45 to 51

Swimming Pool Discharge DRAIN — FIG. Z-800

Z-800



I.P.S. Outlet



Caulk Outlet

I. P. S. or inside caulk Pipe Size A	Str. Dia.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Approx. Wt. Lbs.
2″	8″	$17.50	$29.40	$50.40	$25.60	$35.40	26
3″	8″	18.40	30.80	52.50	26.40	36.80	26
4″	8″	20.30	34.00	58.80	28.90	50.00	26
Clamping collar, add		2.40	3.80	4.80			
Chrome plated strainer, add					7.20	7.20	
White metal strainer, add					12.80	12.80	

I. P. S. or Inside Caulk Pipe Size A	Str. Dia.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Approx. Wt. Lbs.
3″	10″	$23.90	$42.00	$94.50	$44.10	$64.10	48
4″	10″	23.90	42.00	94.50	44.10	64.10	48
5″	10″	25.40	45.20	98.00	46.40	67.20	48
6″	10″	26.30	47.30	101.50	48.10	69.30	48
Clamping collar, add		3.20	4.80	5.60			
Chrome plated strainer, add					11.20	11.20	
White metal strainer, add					19.20	19.20	

Dimensions for Small Size Body

Pipe Size A	B	C	D	E	E*
2″	10″	13½″	2″	2¾″	4¾″
3″	10″	13½″	2″	2¾″	4¾″
4″	10″	13½″	2″	2¾″	4¾″

*For caulked outlet.

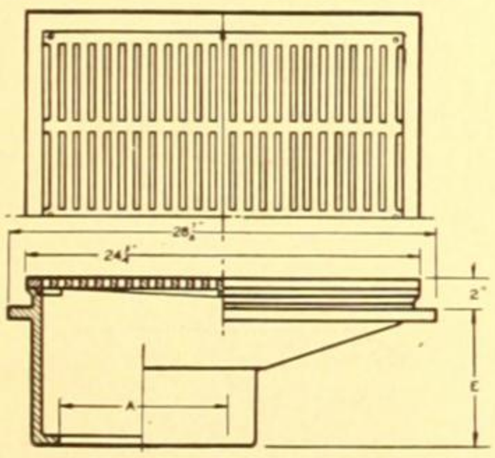
Dimensions for Large Size Body

Pipe Size A	B	C	D	E	E*
3″	13¼″	17″	2¼″	3⅛″	4⅝″
4″	13¼″	17″	2¼″	3⅛″	4⅝″
5″	13¼″	17″	2¼″	2¾″	5″
6″	13¼″	17″	2¼″	2¾″	5″

*For caulked outlet.

Anchorage flange provides permanent leak-proof installation.

Main Outlet Pool DRAIN — FIG. Z-801



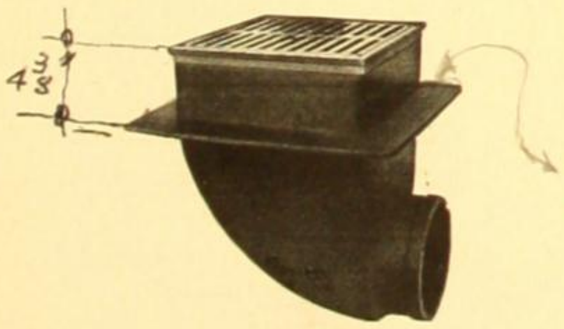
Z-801—Caulk Outlet

Pipe Size A	E	Bronze Rim and Strainer Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Approx. Wt. Lbs.
6″	7¾″	$142.20	$156.50	180
8″	7¾″	147.50	165.50	185
10″	7¾″	168.50	201.70	189
12″	7¾″	195.60	237.80	195

I. P. S. outlet available.

Supersize rapid discharge drain can be installed in bottom, or side wall. Anchorage flange assures tight installation.

Swimming Pool Discharge DRAIN — FIG. Z-805



Z-805—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Bronze Rim and Grate Galv. (GB)
4-5-6″	$ 59.50	$102.60	$220.50	$ 82.60	$124.80
6-8-10″	125.30	210.40	451.50	158.20	239.40
Clamping collar, add	3.50	5.30	10.50		

flat on top of collar shown — Quebec

Add to (CB) and (GB) Lists for

Pipe Size A	C. P. Chrome Pl.	W. M. White Metal
4-5-6″	$14.40	$18.00
6-8-10″	16.00	32.00

Large strainer open area ratio. Quick discharge. Concrete anchorage flange.

Z-805 Continued on Following Page

Mr Tremaine

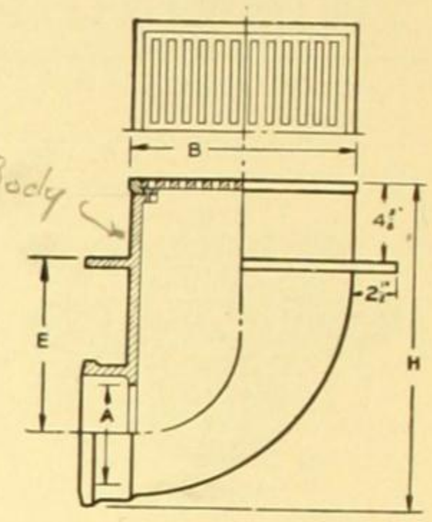
(Continued from Previous Page)

FIG. Z-805 Swimming Pool Discharge DRAIN

Pipe Size A	B	E	H	Approx. Wt. Lbs.
4"	12"x12"	10⅝" + 4⅜ = 15"	18"	94
5"	12"x12"	10⅛" 14¼	18"	95
6"	12"x12"	9⅝" + 4⅜ = 14"	18"	96
6"	12"x12"	21⅝" 26	30"	125
8"	12"x12"	20⅝" + 4⅜ = 25"	30"	128
10"	12"x12"	18⅝" 24"	30"	132

I. P. S. outlet available.

Square Body



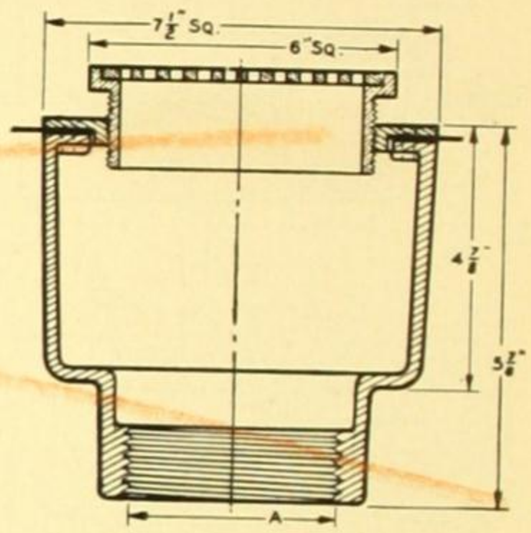
Z-805—Caulk Outlet

FIG. Z-807 Swimming Pool DRAIN With Non-Slip Top

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	$30.00	$46.80	$57.60	28

Caulk outlet available; outlet dimension approximately 1½" longer.

Grit top eliminates danger of slipping when wet. Particularly desirable around pool edge and adjacent areas. Adjustable head. Flashing provision if desired.



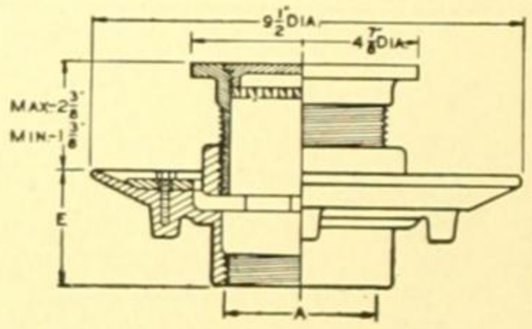
Z-807—I.P.S. Outlet

FIG. Z-808 Antiseptic Foot Bath DRAIN With Solid Screwed Top

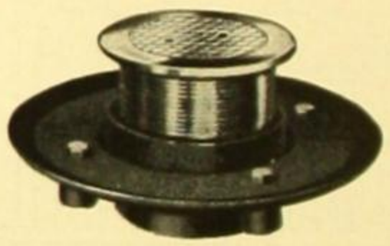
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for Chrome Top	Add for Locking Device	Pipe Size A	E
2-3-4"	$29.30	$39.60	$44.80	$3.80	$7.50	2"	2½"
						3"-4"	2¾"
Clamping collar deduct	1.50	2.70	4.00				

Approx. Wt. Lbs. 2"-3"-4"—15.
Caulk outlet available; "E" dimension approximately 1½" longer.

Strainer head has non-slip water tight top for retaining antiseptic foot bath water. By removing top, quick drainage is provided through the secondary strainer so that the foot bath can be scoured easily.



I.P.S. Outlet



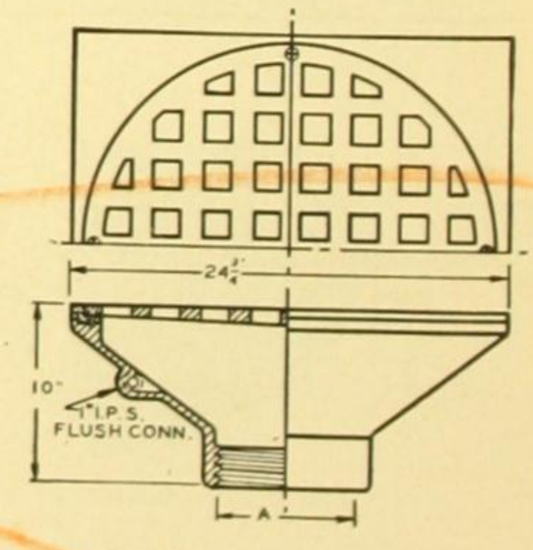
Z-808

FIG. Z-808A Zoo Or Animal Den DRAIN With Flushing Connection

Pipe Size A	Bronze Top and Grate Coated (CB)	Bronze Top and Grate Galv. (GB)	Add for C. P. Top	Add for W. M. Top	Approx. Wt. Lbs.
3 to 8"	$132.80	$175.50	$25.60	$44.80	115

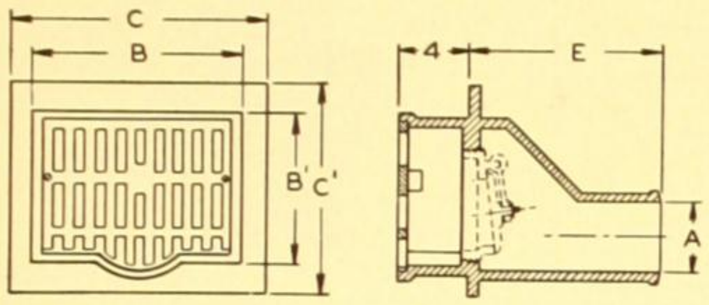
Caulk outlet available; body height dimension the same.
Perforated top available.

Large drainage area assures rapid discharge. Flushing connection serves as a washdown for accumulations.



Z-808A—I.P.S. Outlet

Pool Or Pit DRAIN — FIG. Z-809



Z-809—Caulk Outlet

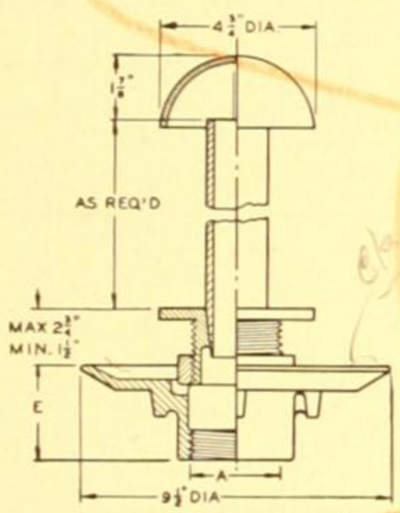
Pipe Size A	Coated (DC)	Galv. (G)	With Bronze Frame and Grate Coated (CB)	Galv. (GB)	Add for Back Water Valve	Approx. Wt. Lbs.
2-3-4″	$20.60	$30.90	$36.60	$56.30	$12.80	48
5-6″	26.20	39.50	47.40	72.80	19.20	55
Clamping collar, add—small	7.70	9.60				
large	8.80	11.20				

Pipe Size A	B	B′	C	C′	E
2-3-4″	9⅜″	7″	13″	11″	9″
5-6″	11⅛″	8½″	14⅝″	12″	9½″

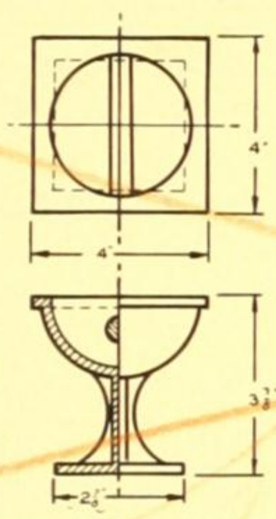
I. P. S. outlet available.

Excellent for wall drainage in pools or any other installation at low sewer level. Backwater valve optional but usually desirable. Anchorage flange.

POOL DRAIN And Overflow Connection - bronze — FIG. Z-809A



Z-809A—I.P.S. Outlet



Z-809B

Pipe Size A	Height	E	Pol.	C. P.	Approx. Wt. Lbs.
2″	6″	2½″	$40.80	$53.30	20
For each additional inch in height add			1.40	.40	
3″	6″	2¾″	50.40	65.30	22
For each additional inch in height add			2.00	4.00	

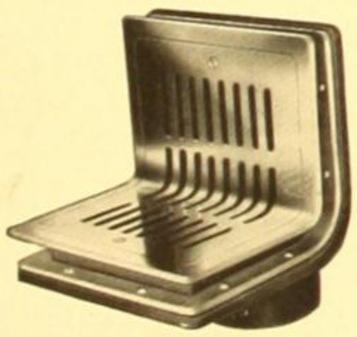
Note: Lists cover complete drain.
Caulk outlet available; "E" dimension approximately 1½″ longer.

LANE MARKER - bronze — FIG. Z-809B

Pol.	C. P.	Approx. Wt. Lbs.
$13.60	$18.70	6

These and many other special pool accessories are available.

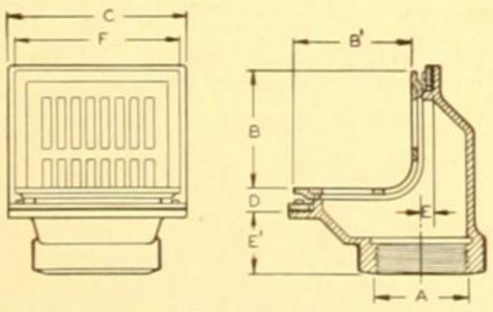
Swimming Pool Discharge DRAIN, Angle Type Reversible — FIG. Z-810


Z-810

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)
2-3-4″	$27.00	$36.30	$ 72.60	$39.80	$ 51.70
4-5-6″	55.20	77.60	147.60	72.00	96.80

Add to (CB) and (GB) Lists for

Pipe Size A	C. P.	W. M.
2-3-4″	$10.20	$12.80
4-5-6″	15.40	16.00



I.P.S. Outlet

Pipe Size A	B	B′	C	D	E	E′	F	Approx. Wt. Lbs.
2″	5″	5″	7½″	1¼″	+1 13/16″	2¾″	7″	18
3″	5″	5″	7½″	1¼″	+1 9/32″	2¾″	7″	19
4″	5″	5″	7½″	1¼″	+ ¾″	2¾″	7″	20
4″	7″	7″	12⅝″	1¼″	+ 13/16″	3½″	11¾″	65
5″	7″	7″	12⅝″	1¼″	+ 9/32″	3½″	11¾″	66
6″	7″	7″	12⅝″	1¼″	− ¼″	3½″	11¾″	67

Caulk outlet available; "E'" dimension approximately 1½″ longer.

Angle face serves as overflow; assures continuous drainage even though leaves, paper, etc. may clog the bottom surface of the pool drain. Outlet may be made either vertically or horizontally.

FIGS. Z-820-822 Swimming Pool GUTTER DRAINS - bronze

FIG. Z-820

Pipe Size A	B	E	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2"	2¼"x3¾"	2¾"	$ 7.20	$ 8.80	$ 9.60	2
2-3"	2¾"x5½"	2½"	11.20	13.30	14.40	3

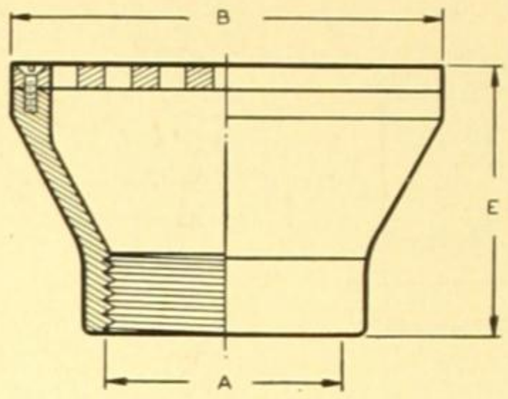
FIG. Z-821

Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2"	$11.20	$13.80	$14.40	3

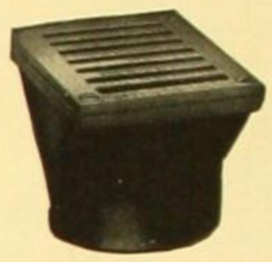
FIG. Z-822

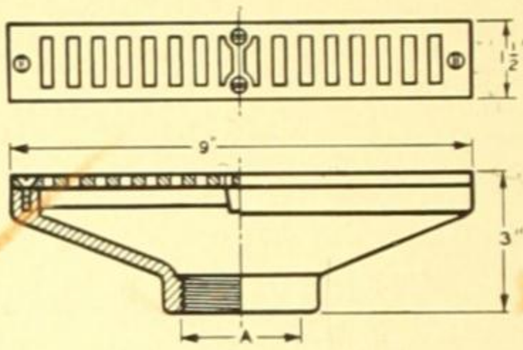
Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2½"	$13.60	$16.20	$18.00	5

For any type of narrow gutter drainage.

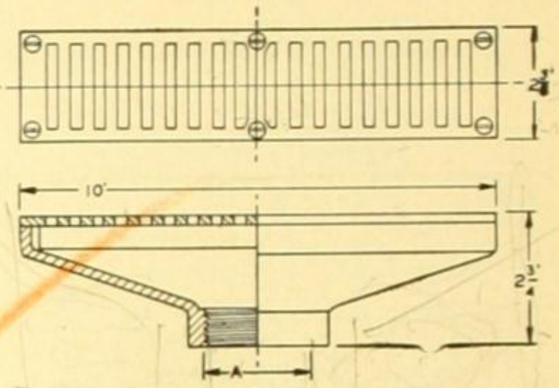


I.P.S. Outlet


Z-820



Z-821—I.P.S. Outlet



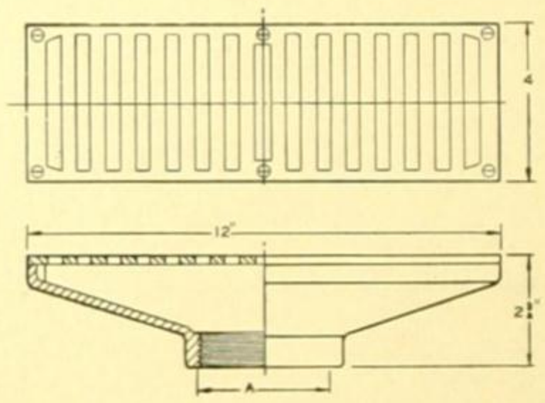
Z-822—I.P.S. Outlet

FIG. Z-823 Swimming Pool GUTTER DRAIN

Pipe Size A	With Bronze Strainer Coated	Galv.	All Bronze	Add for C. P.	W. M.	Approx. Wt. Lbs.
2-3"	$12.00	$17.30	$24.00	$3.60	$5.60	8

Caulk outlet available; body height dimension approximately 1½" longer.

Practical for walks, driveways, and other narrow installations.



I.P.S. Outlet

Z-823

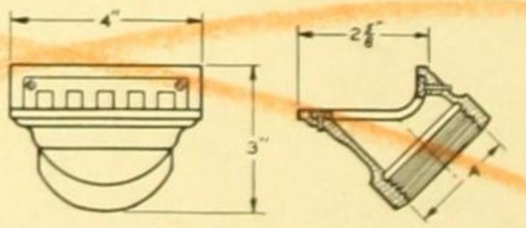
Not Stock

FIG. Z-825 and Z-825A Swimming Pool GUTTER DRAINS - bronze

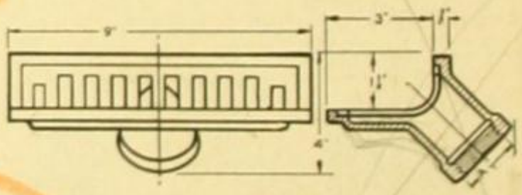
FIG. Z-825

Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1-1½-2"	$ 8.80	$12.00	$15.20	2
FIG. Z-825A				
1½-2-3"	26.40	34.40	42.80	9

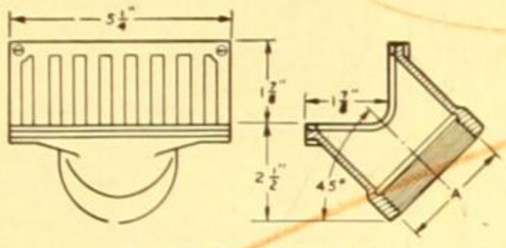
Vertical faces serve as overflows.



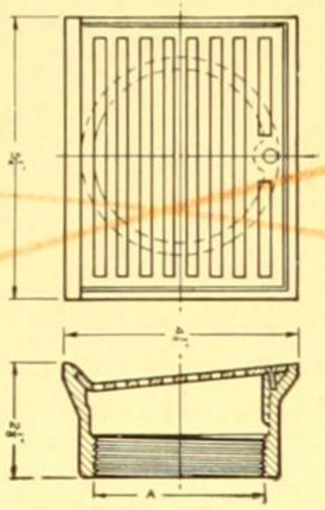
Z-825—I.P.S. Outlet



Z-825A—I.P.S. Outlet



Z-826—I.P.S. Outlet



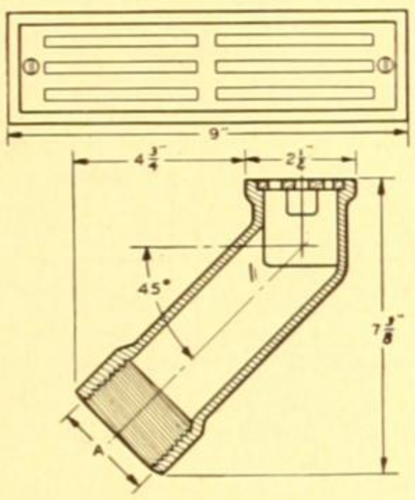
Z-827—I.P.S. Outlet

Swimming Pool GUTTER DRAINS — FIG. Z-826-827

FIG. Z-826

Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2-2½"	$10.40	$14.20	$14.60	4
FIG. Z-827				
2-2½-3"	12.80	16.00	18.80	5

Vertical faces serve as overflows.

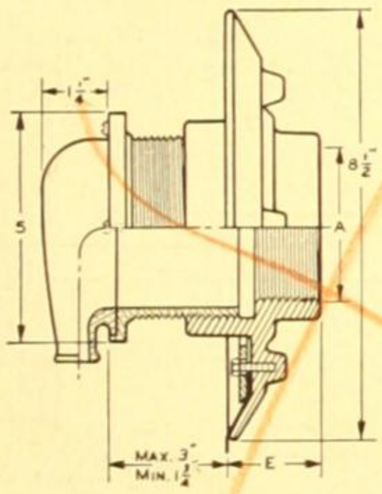


Z-830—I.P.S. Outlet

Swimming Pool GUTTER DRAIN — FIG. Z-830

Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2"	$16.80	$18.40	$19.20	7

Angle outlet simplifies installation.



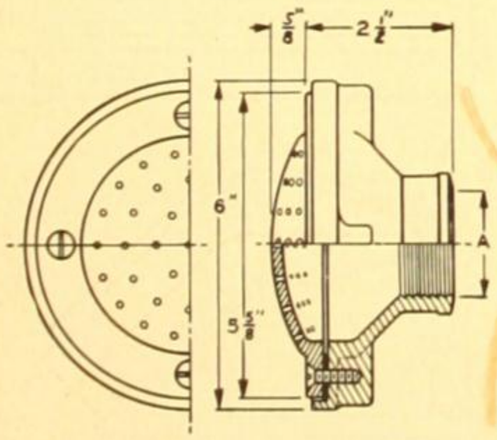
Z-835—I.P.S. Inlet

Swimming Pool SPRAY INLET — FIG. Z-835

Pipe Size A	E	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2"	2½"	$17.60	$23.00	$24.00	$4.80	$8.00	12
3"	2¾"	19.20	25.90	26.40	4.80	8.00	13
4"	2¾"	20.80	28.80	28.80	4.80	8.00	14
Clamping collar add		1.50	2.70	4.00			

Caulk outlet available; "E" dimension approximately 1½" longer.

For swimming pool circulating inlets above water level. Flashing provision guards against leakage.



Z-837—I.P.S. Inlet

Wading Pool SPRAY INLET — FIG. Z-837

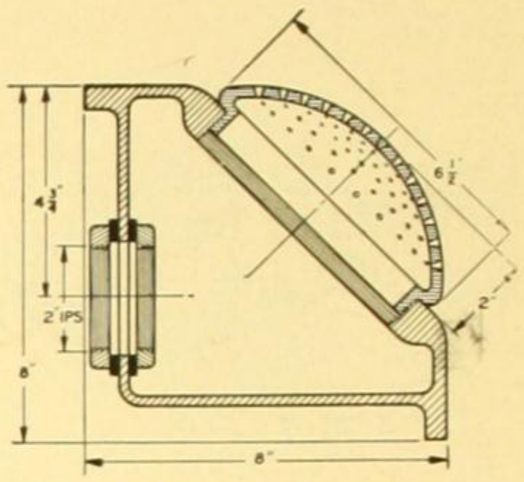
Pipe Size A	Plain Bronze	Polished Bronze	Add for C. P. Top	Approx. Wt. Lbs.
1½"	$20.00	$22.40	$4.40	3

Balanced face perforations provide uniform spray. Face removable for cleaning.

FIG. Z-838 Children's Play Pool Spray HEAD

Pipe Size A	Polished Bronze	Add for C. P. Dome	Approx. Wt. Lbs.
2"	$128.00	$20.00	33

Pressure reducing chamber behind balanced face perforations enables children to play directly on the face without harm. Face removable for cleaning. Angle body design with concrete anchors provide rigid installation.

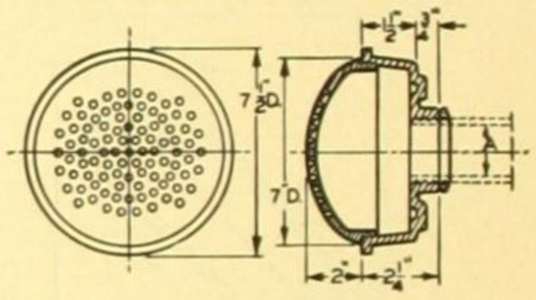


Z-838—I.P.S. Inlet

FIG. Z-839 Swimming Pool SPRAY INLET

Pipe Size A	Polished Bronze	Add for C. P.	Approx. Wt. Lbs.
2"	$59.20	$8.00	11

Provides uniform spray under balanced pressure.

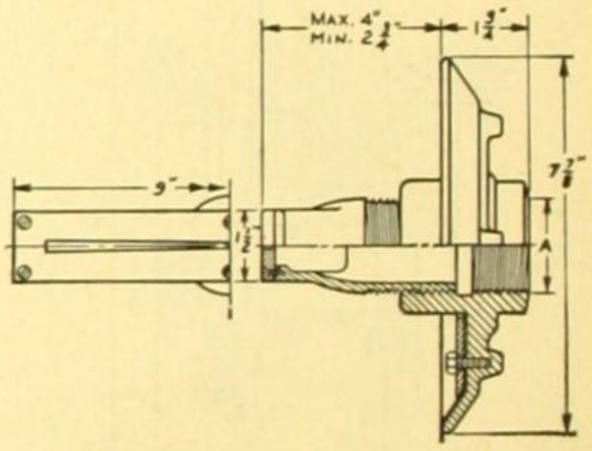


Z-839—I.P.S. Inlet

FIG. Z-840 Swimming Pool FLUSHING INLET

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2-2½"	$21.00	$27.90	$32.80	$1.60	$2.40	12
Less clamping collar deduct	1.50	2.70	4.00			
Spray heads only			15.20			

For swimming pool surface flushing and recirculating inlets at water level. Diverging spray flushes surface of pool; supplies clean water for circulation. Has flashing provision.



Z-840—I.P.S. Inlet

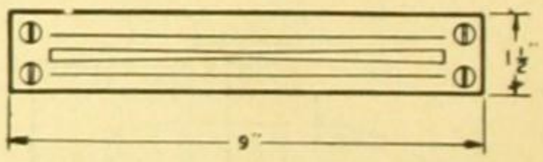
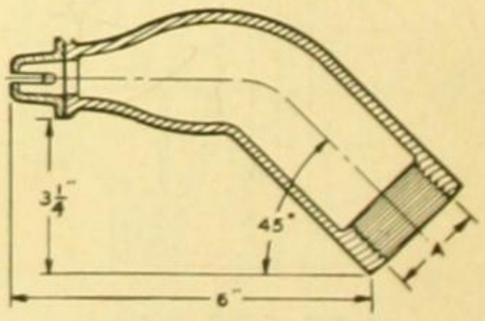


FIG. Z-845 Swimming Pool FLUSHING INLET

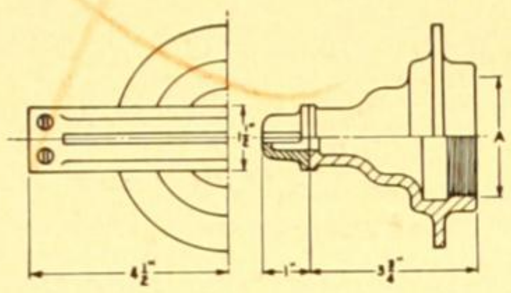
Pipe Size A	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
1½-2-2½"	$21.00	$24.80	$26.20	7

For same service as Z-840.



Z-845—I.P.S. Inlet

Z-850



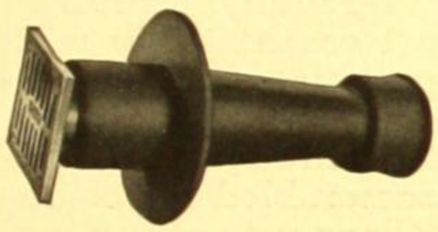
I.P.S. Inlet

Swimming Pool FLUSHING INLET - bronze — FIG. Z-850

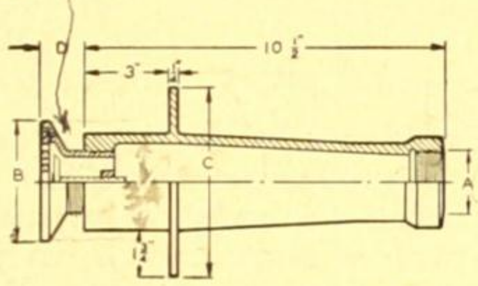
Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2-2½"	$14.00	$15.60	$18.00	6

For same service as Z-845. Has anchorage provision.

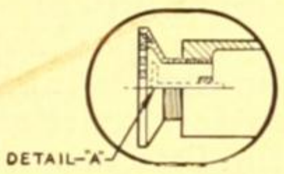
Neck 2⅜" ϕ Not IPS Thread



Z-855



I.P.S. Outlet



DETAIL-"A"

Flow Regulating Device

Swimming Pool RECIRCULATING FITTING — FIG. Z-855

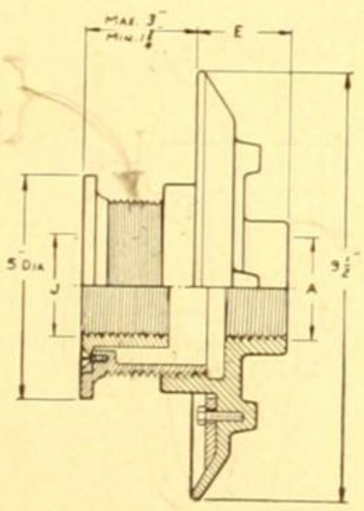
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2"	$13.60	$19.20	$28.80	$2.00	$ 3.00	14
3"	18.60	25.10	42.40	2.60	4.00	22
Clamping collar add	1.60	2.90	4.00			
Add for detail "A" when used with Z-855 Inlet Body						
1½-2"	6.40	7.40	9.60			
3"	9.60	11.20	14.40			
Detail "A" flow regulating device only						
1½-2"	13.40	13.40	16.00			
3"	20.60	22.20	24.00			

Pipe Size A	B	C	D
1½-2"	4"x4"	6¾"	1"—2"
3"	6"x6"	8"	1"—2"

Hub or spigot connections available.

Detail "A" shows flow regulating device. Long body extends through wall. Anchorage flange provided.

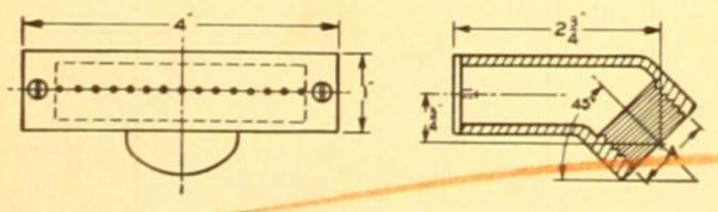
3½" IPS Thread



Z-865—I.P.S. Outlet

Swimming Pool Vacuum Cleaning Connection — FIG. Z-865

Pipe Size A	E	J	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2"	2½"	1½"—2"	$16.80	$22.10	$24.80	$2.10	$3.20	13
3"	2¾"	1½"—2"	18.40	24.00	28.80	2.10	3.20	14
4"	2¾"	1½"—2"	20.00	26.90	31.20	2.10	3.20	15
Clamping collar add			1.50	2.70	4.00			
Plug add			1.60	1.60	1.60	1.30	1.60	

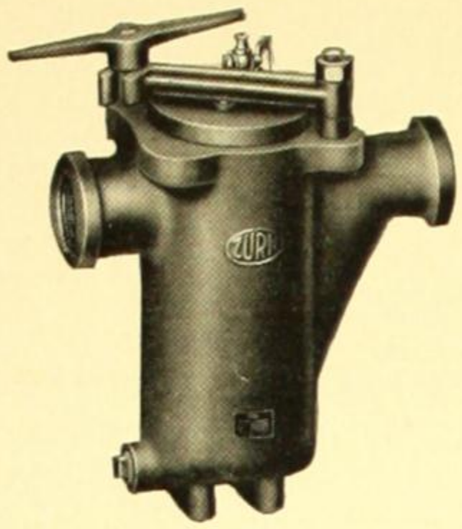


Z-895—I.P.S. Inlet

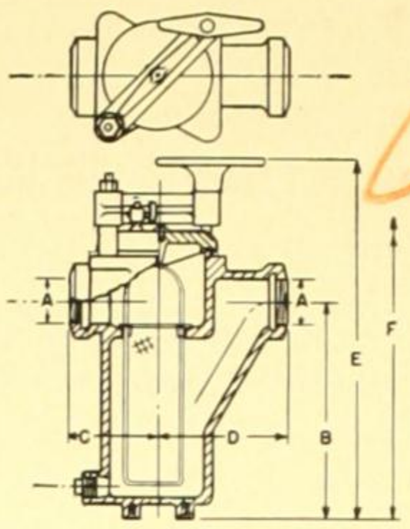
CHLORINE SPRAY INLET - bronze — FIG. Z-895

Pipe Size A	Pol. Face	C. P. add	W. M. add	Approx. Wt. Lbs.
½-¾-1"	$19.80	$2.80	$4.00	2

An inexpensive manner of introducing chlorine into pool.



Z-900



I.P.S. Inlet and Outlet

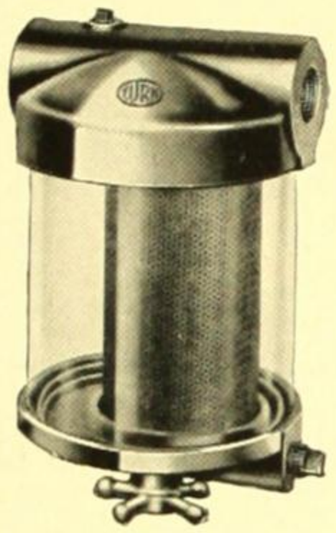
SWIMMING POOL HAIR INTERCEPTOR, Cast Iron — FIG. Z-900

Pipe Size A	B	C	D	E	F	Coated (DC)	Galv. (G)
2"	9 3/16"	3 3/4"	5 1/2"	15 7/16"	21 1/4"	$117.00	$152.10
3"	12 1/4"	5 1/2"	7 1/2"	17 3/4"	26 1/8"	117.00	152.10
4"	16 7/8"	7 1/8"	10 5/8"	25 5/16"	36 1/8"	117.00	152.10

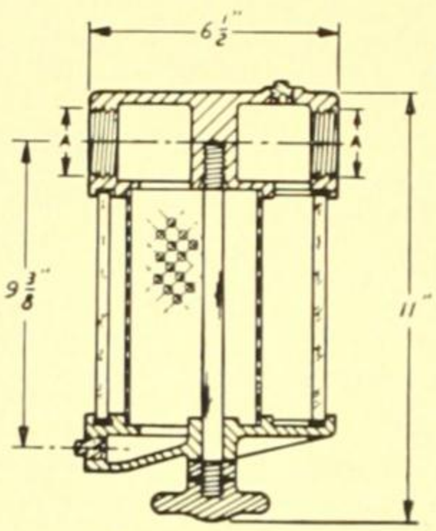
Approx. Wt. Lbs. 2"—50, 3"—80, 4"—95.

"F" dimension—space required for basket removal

Clamp cover provides quick opening and closing. Tested for 250 lbs. pressure for working pressures of 125 lbs. Furnished with air relief valve. Bottom cleanout.



Z-902



I.P.S. Connections

SWIMMING POOL HAIR INTERCEPTOR — FIG. Z-902

Pipe Size A	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	$70.00	16

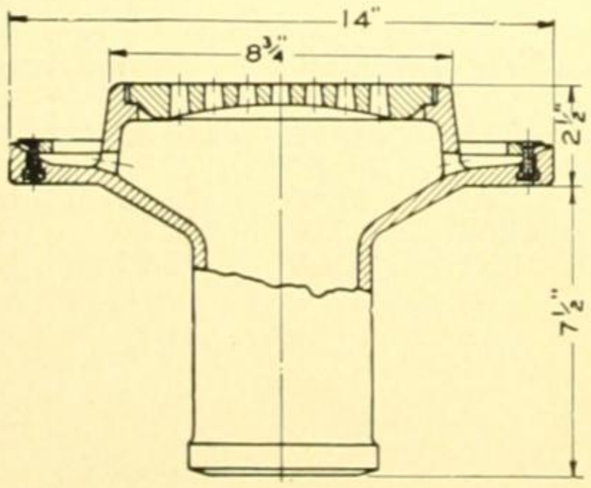
Spare Basket $20.00; Spare Tube $20.00

Screen and condition of fluid readily examined through lucite tube. Screen set eccentrically with respect to body minimizes pressure drop. Interceptor is supportable in pipe line in any position. Flow may be in either direction through it. Interceptor may be completely disassembled for cleaning and is therefore sanitary. Cleanouts at top and bottom so interceptor may be drained prior to cleaning. Open area ratio 11:1.

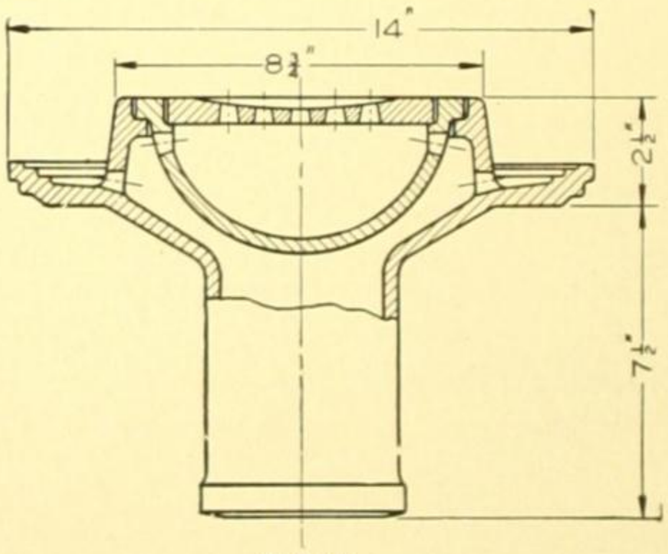
ACID RESISTING PRODUCTS

HI-SIL

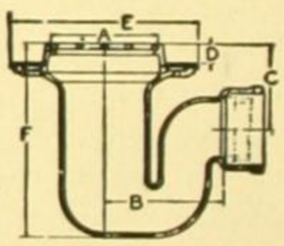
Acid Resisting Floor Drains



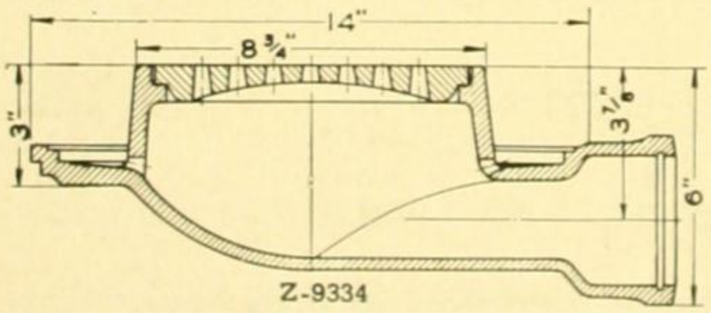
Z-5501



Z-5687



Z-7081 & Z-9058

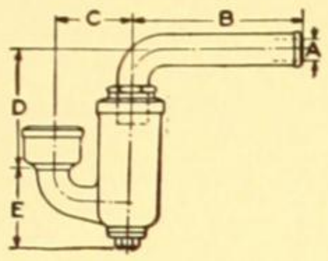


Z-9334

Fig. No.	Size Outlet Inches	Wt. Lbs.	Price With Strainer	Extra Strainer Price	A In.	B In.	C In.	D In.	E In.	F In.	Flashing Ring
Z-5500	2-3-4-6	45	$42.00	$7.50	.....	.....	.....	.....	.....	.....	No
Z-5501	2-3-4-6	45	64.50	7.50	.....	.....	.....	.....	.....	.....	Yes
Z-7081-A	1 1/2	35	49.20	4.10	4	6 1/2	3 7/8	1 1/2	10 3/8	9	No
Z-7081-B	2	37	49.20	4.10	4	6 1/2	3 5/8	1 1/2	10 3/8	9	No
Z-9058-3	3	70	120.00	7.50	8	9	5 7/8	1 1/2	14	14 1/2	No
Z-9058-4	4	73	120.00	7.50	8	9	6 3/8	1 1/2	14	14 1/2	No
Z-5687	2-3-4-6	53	60.00	7.20	.....	.....	.....	.....	.....	.....	No
Z-5687-A	2-3-4-6	53	79.00	7.20	.....	.....	.....	.....	.....	.....	Yes
Z-9334	2	37	58.00	7.50	.....	.....	.....	.....	.....	.....	No

Hi-Sil Acid Resisting Traps

1½" Z-7268
2" Z-7269

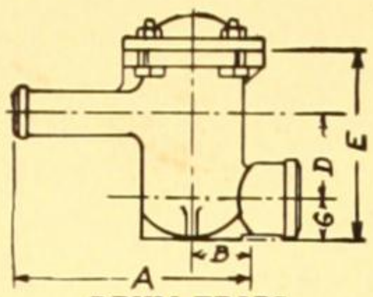


NON-SYPHON P TRAPS

Fig. No.	Size A Inches	Price	B In.	C In.	D In.	E In.
Z-7268	1½	$28.40	8	4½	6¾	5¼
Z-7269	2	33.60	8	5½	6	9

Approx. Wt. Lbs. Fig. No. Z-7268—18, Fig. No. Z-7269—31.

1½" Z-5498
2" Z-6165

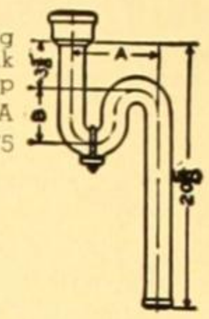


DRUM TRAPS

Fig. No.	Size In.	Price	A In.	B In.	D In.	E In.	G In.
Z-5498	1½	$57.65	11	2⅝	4	9⅜	2⅜
Z-6165	2	58.55	11⅜	2¾	4½	10⅜	2⅝

Approx. Wt. Lbs. Fig. No. Z-5498—28, Fig. No. Z-6165—31.

Long Sink Trap
1½" Z-5419-A
2" Z-7075

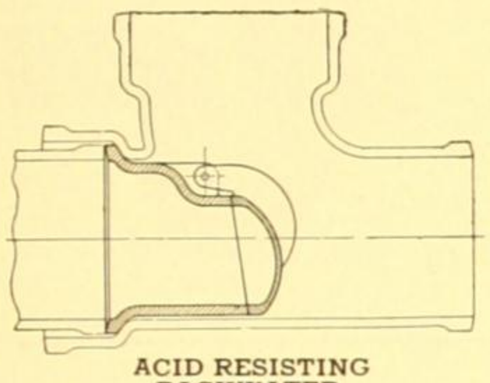


LONG SINK TRAPS

Fig. No.	Size Inches	Price	A In.	B In.
Z-5419-A	1½	$22.00	6¾	4¼
Z-7075	2	26.00	7¾	5

Approx. Wt. Lbs. Fig. No. Z-5419-A—12, Fig. No. Z-7075—27.

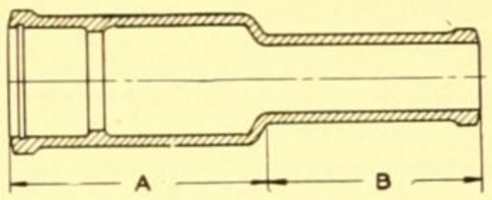
Hi-Sil Acid Resisting Miscellaneous Products



ACID RESISTING BACKWATER VALVES PALMER TYPE

Size Inches	Price
3	$25.00
4	47.00
6	89.00
8	98.00

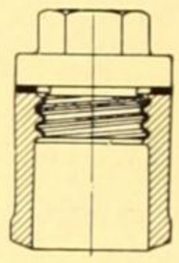
Price does not include tee.



Z-5045, Z-5070, Z-5095 and Z-5144

ACID RESISTING INSERTABLE JOINTS

Fig. No.	Size, Inches	A—Inches	B—Inches	Price	Weight, Lbs.
5045	2	7¾	6½	$7.50	11
5070	3	8⅜	7⅜	9.80	16
5095	4	9⅛	7⅞	14.90	22
5144	6	9⅛	7⅞	25.20	30



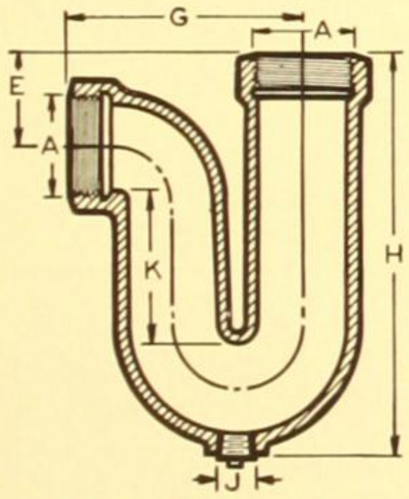
ACID RESISTING CLEANOUT PLUGS

Size Inches	Weight Pounds	Price
1½	2¾	$3.95
2	3½	4.70
3	6½	7.90
4	11	14.20
6*	14	19.55

*With bolted cover.

All Prices, Hi-Sil Acid Resisting Products, F.O.B. Erie, Pa. (No Freight Allowed)

TRAPS AND VALVES . . . Pages 53 to 63

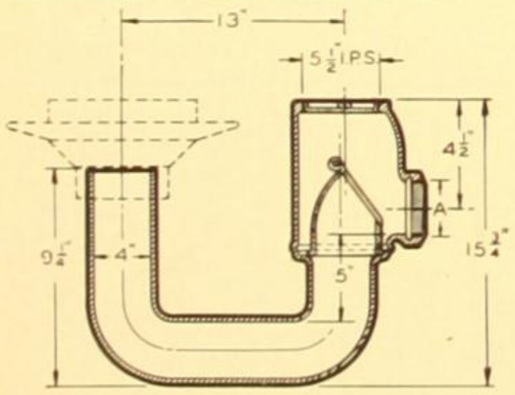


Z-1000—I.P.S. Outlet

DEEP SEAL "P" TRAP — FIG. Z-1000

Pipe Size A	E	G	H	J	K	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1¼"	2"	4¼"	6⅞"	¾"I.P.	2½"	$ 5.60	$ 9.00	$16.00	2
1½"	2⅜"	4¾"	7⅝"	¾"I.P.	2½"	6.20	10.60	17.60	3
2"	1¾"	6 1/16"	9½"	1¼"I.P.	4"	6.70	11.50	19.20	8
3"	3"	7½"	13"	1¼"I.P.	5"	10.60	17.00	25.60	17
4"	4"	9½"	15 1/16"	1¼"I.P.	5"	16.00	26.90	40.00	33
For bronze cleanout plug add						1.60			

Designed for use with floor and area drains.



Z-1005—I.P.S. Outlet

DEEP SEAL TRAP WITH FLOOR LEVEL CLEANOUT — FIG. Z-1005

Pipe Size A	With polished bronze cleanout plug: Coated (DC)	Galv. (G)	If Backwater Device not Required, Deduct	Approx. Wt. Lbs.
2"	$31.50	$43.20	$ 6.40	60
3"	49.50	66.60	9.60	70
4"	57.00	77.40	12.80	80

Drain not included in above prices.

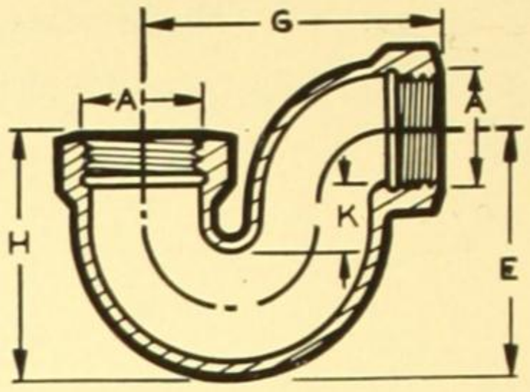
Regularly furnished with backwater device. For use with any type floor or area drain.

FIG. Z-1010 SHALLOW SEAL "P" TRAP

Pipe Size A	E	G	H	K	Coated (DC)	Galv. (G)	All Bronze (BR)
1¼"	3⅝"	4 5/16"	3⅝"	1½"	$1.50	$ 2.30	$ 4.80
1½"	3 11/16"	4¾"	3 11/16"	1½"	1.80	2.70	5.60
2"	5⅜"	5 11/16"	4¼"	2"	2.30	3.60	6.40
3"	7"	7"	8"	2"	5.40	7.60	16.00
4"	7½"	9¾"	5½"	1"	9.00	14.40	28.80
For brass cleanout, add					1.60		

Approx. Wt. Lbs. 1¼"—2½, 1½"—3, 2"—5, 3"—13, 4"—35.

For use with any type floor drain where space limitation is important.



I.P.S. Outlet

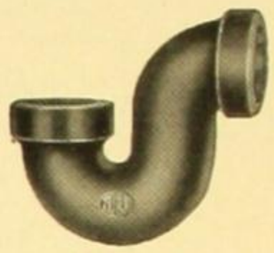
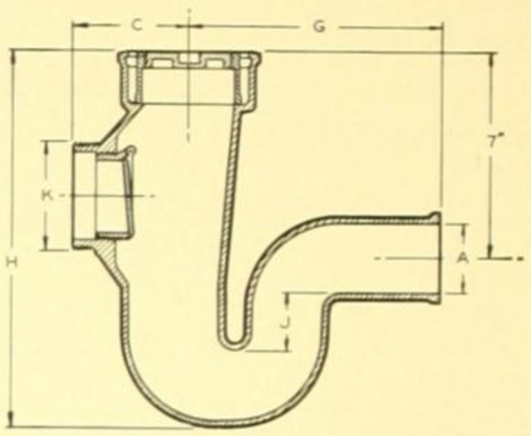

Z-1010

FIG. Z-1015 COMBINED TRAP, B.W. SEWER VALVE AND CLEANOUT

Pipe Size A	C	G	H	J	K	Coated (DC)	Deduct for Backwater Valve, if not desired
3"	5¼"	11¼"	15⅞"	4"	4"	$30.00	$ 9.00
4"	4¾"	13"	18"	4"	5"	35.00	12.00

Approx. Wt. Lbs. 3"—35, 4"—42.

For use with any type floor or area drain.



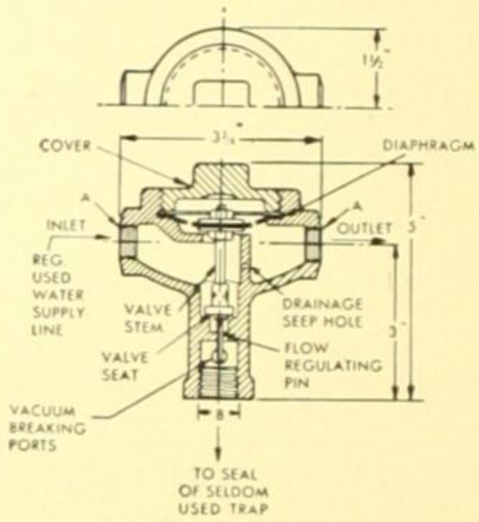
I.P.S. Inlet and Spigot Outlet

Z-1015

FIG. Z-1021 AUTOMATIC TRAP-PRIMER

Furnished with ½" or ¾" I. P. Connections—$10.00
Union Connection—Price on Application
To provide any Drain with Primer Connection, add to list prices $2.50
Approx. Wt. Lbs. 2

Provides the only means of maintaining proper and constant seal in basement floor drain traps and other traps used infrequently. Seldom used traps tend to lose their seals by evaporation. Primer is installed in a frequently used water supply line, and connected to the trap. (See dimensional diagram to the right) Flow is from left to right; water enters the primer, forces the diaphragm upward, and opens the valve, allowing water to replenish the trap seal. The diaphragm, with flat valve seat, insures that "liming" and other hard water deposits will not freeze the plunger. Tapered flow regulator pin meters the water—as pressure increases, the pin rises, reducing the flow.
Prevents foul and unsanitary sewer odors from entering the building. Complies with all modern plumbing and sanitary codes.



"A"—½", ¾" "B"—½"
Width—I.P.S.—3¾" Union Conn.—6¾"

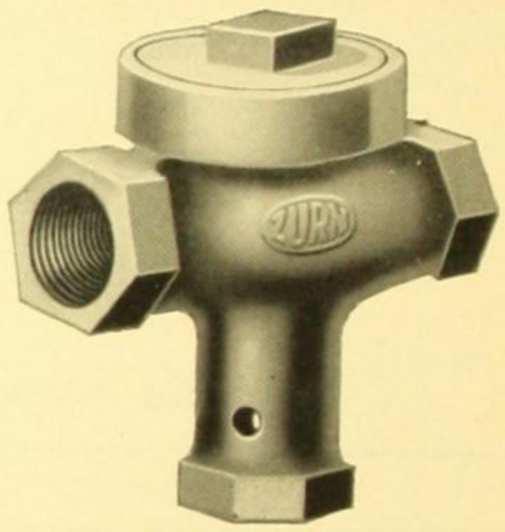
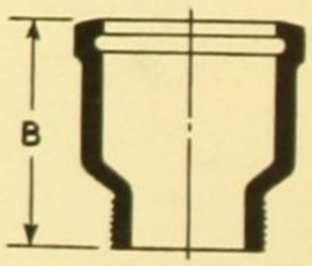

Z-1021—I. P. Connection
Patented

FIG. Z-1030 PIPE ADAPTER

Iron Pipe to Soil Hub

Pipe Size	B	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	4"	$ 2.00	$ 3.00	$ 4.90	3
3"	4½"	2.80	4.20	7.00	5
4"	4¾"	4.20	6.30	10.50	6
5"	4¼"	5.30	8.80	13.20	8
6"	4¼"	6.30	10.20	15.80	9
8"	4¼"	9.00	13.50	22.40	15

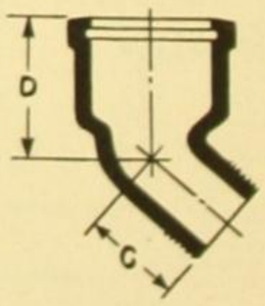


Z-1030

FIG. Z-1035 PIPE ADAPTER—45°

Iron Pipe to Soil Hub

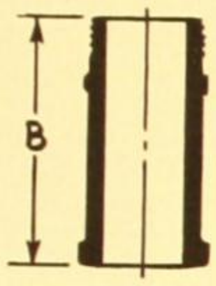
Pipe Size	C	D	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	2"	3"	2.50	$ 3.60	$ 5.70	4
3"	2⅜"	4"	3.40	5.00	8.00	6
4"	3"	4½"	4.90	7.30	12.00	7
5"	2½"	3¾"	6.30	10.00	15.00	9
6"	2½"	3¾"	7.50	11.70	18.00	12
8"	4"	5⅝"	10.00	15.50	26.20	20



Z-1035

PIPE ADAPTER — FIG. Z-1040

Iron Pipe to Soil Spigot

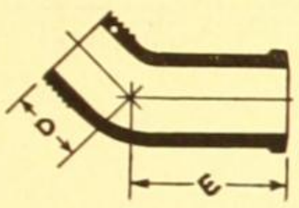


Z-1040

Pipe Size	B	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	6½″	$1.30	$ 2.00	$ 3.10	2
3″	6½″	1.80	2.80	4.40	4
4″	6½″	2.70	4.70	7.00	6
5″	6½″	3.70	6.50	9.80	8
6″	6½″	4.80	8.30	12.60	10
8″	6½″	7.90	13.90	21.00	17

PIPE ADAPTER—45° — FIG. Z-1041

Iron Pipe to Soil Spigot

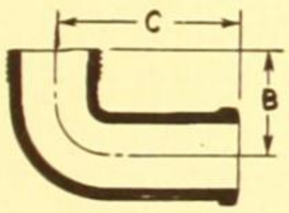


Z-1041

Pipe Size	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	2″	6″	$2.10	$ 3.50	$ 5.60	3
3″	2½″	6″	3.20	5.50	8.40	7
4″	2¾″	6″	4.80	8.30	12.60	10
5″	3″	6″	5.80	10.20	15.40	12
6″	3½″	6″	7.40	12.80	19.60	16

PIPE ADAPTER—90° — FIG. Z-1042

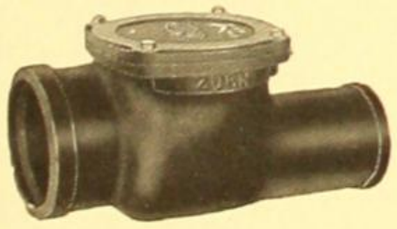
Iron Pipe to Soil Spigot



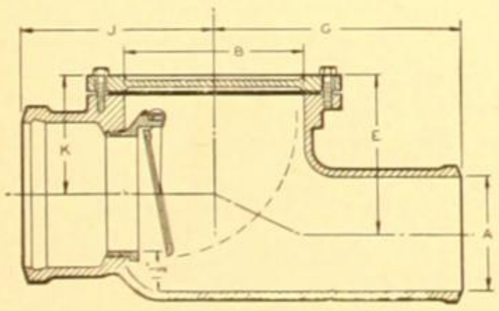
Z-1042

Pipe Size	B	C	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2″	2¾″	6″	$ 2.70	$ 4.70	$ 7.00	5
3″	3¾″	7″	3.90	6.70	10.50	8
4″	4″	8″	6.90	11.90	18.20	14
5″	5″	8½″	8.40	14.70	22.40	16
6″	5½″	9″	10.00	17.40	26.60	17

BACKWATER VALVE — FIG. Z-1090



Z-1090



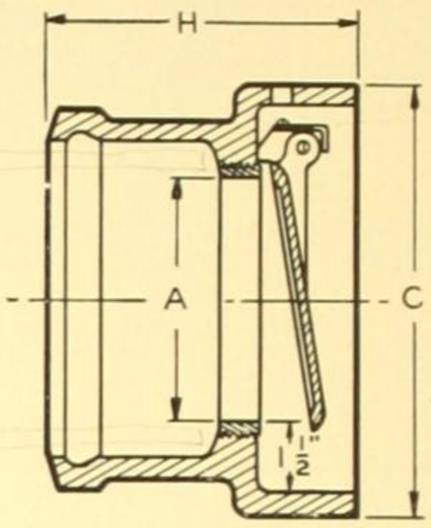
Pipe Size A	B	E	G	J	K	Coated (DC)	Approx. Wt. Lbs.
2″	4⅛″	4½″	7″	5″	2⅞″	$ 18.00	23
3″	5¼″	5⅛″	7⅞″	6″	3⅝″	22.50	30
4″	6⅛″	5⅝″	8½″	6⅝″	4 1/16″	31.50	34
5″	7¼″	6⅛″	9½″	7 3/16″	4⅝″	46.50	50
6″	8 5/16″	6⅝″	10″	7¾″	5⅛″	54.00	57
8″	10″	6⅞″	11¾″	9½″	6 3/16″	90.00	79
10″	12½″	8″	12⅞″	10¾″	7⅜″	216.00	102
12″	14⅜″	9⅝″	13⅜″	11¾″	9″	270.00	180
15″	16¾″	10¾″	17½″	14¾″	10¾″	594.00	325
18″	Dimensions on request					738.00	
24″	Dimensions on request					1350.00	
30″	Dimensions on request					3060.00	

Non-fouling swing gate and clean sweep waterways. For main sewer lines in buildings to protect from back flow of sewage or heavy rainfall.

FIG. Z-1091 BACKWATER VALVE—OPEN TYPE

Pipe Size A	C	H	C.I. Body and Bronze Valve Assembly	With Flanged Ends	Approx. Wt. Lbs.
2″	5½″	4½″	$ 14.40	$ 17.30	10
3″	6½″	5″	18.00	21.60	12
4″	7½″	5″	25.20	30.30	15
5″	8½″	5¼″	37.50	45.00	20
6″	9½″	5¼″	43.20	51.90	23
8″	11½″	6″	72.00	86.40	42
10″	13½″	7″	172.80	207.40	58
12″	15½″	8½″	216.00	266.40	70
15″	17½″	12½″	475.20	570.30	120
18″	Dimensions on request		590.40	708.50	
24″	Dimensions on request		1080.00	1286.00	
30″	Dimensions on request		2440.80	2936.60	

For use in a manhole at end of sewer line, settling basins, etc., as protection against tidewater and flood.



Soil Pipe Connection

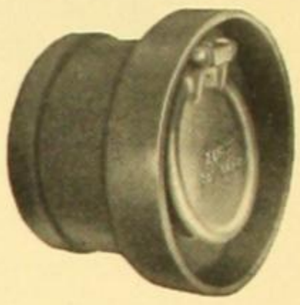
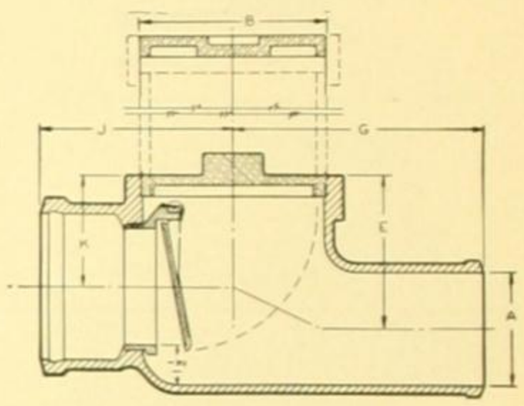

Z-1091

FIG. Z-1095 BACKWATER VALVE

Pipe Size A	Coated (DC)	Approx. Wt. Lbs.	Pipe Size A	Coated (DC)	Approx. Wt. Lbs.
2″	$ 29.70	23	5″	$ 72.00	50
3″	35.10	30	6″	79.20	57
4″	43.20	34	8″	118.80	79
			10″	270.00	102
			12″	345.00	180

Pipe Size A	B.I.P.S.	E	G	J	K
2″	4″	4″	7″	5″	2⅞″
3″	5″	4⅝″	7⅞″	6″	3⅝″
4″	6″	5⅛″	8½″	6⅝″	4 1/16″
5″	7″	5⅝″	9½″	7 3/16″	4⅝″
6″	8″	7⅛″	10″	7¾″	5⅛″
8″	10″	7⅛″	11¾″	9½″	6 3/16″
10″	12″	8″	12⅞″	10¾″	7⅜″
12″	14″	9⅝″	13⅜″	11¾″	9″


Z-1095

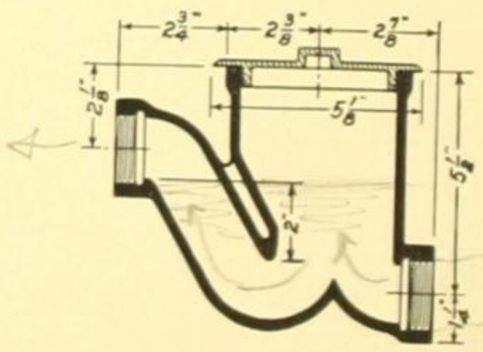
For same service as Z-1090. Bronze removable cover provides extension of cleanout in deep sewers to floor level.

FIG. Z-1100 RESIDENCE AND APARTMENT HOUSE BATH TRAP

SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½″	$5.40	$8.30	$12.20	9

Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.



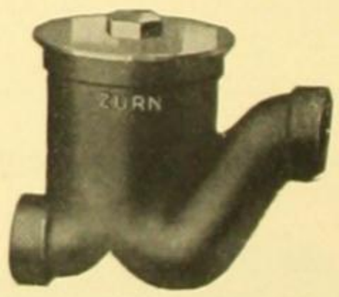
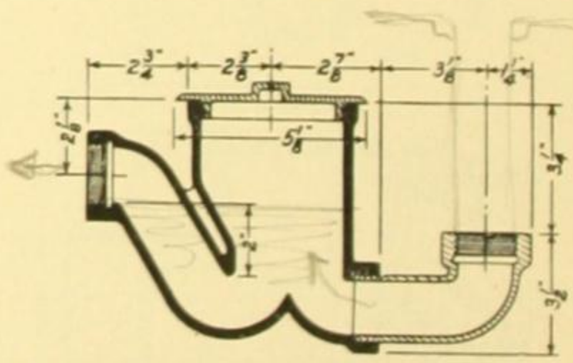

Z-1100

FIG. Z-1101 RESIDENCE AND APARTMENT HOUSE BATH TRAP

SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½″	$6.60	$10.70	$16.00	11

Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.


Z-1101

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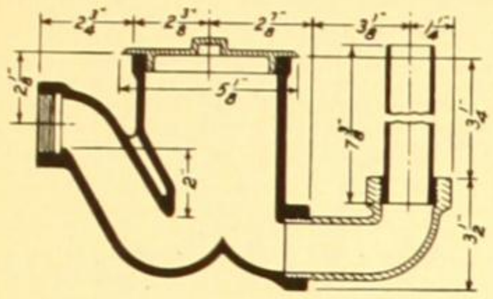

Z-1102

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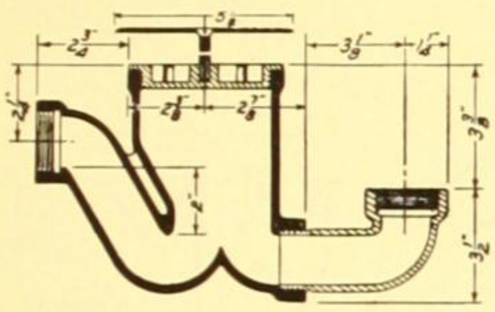
RESIDENCE AND APARTMENT HOUSE BATH TRAP — FIG. Z-1102
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 9.90	$14.80	$19.50	12

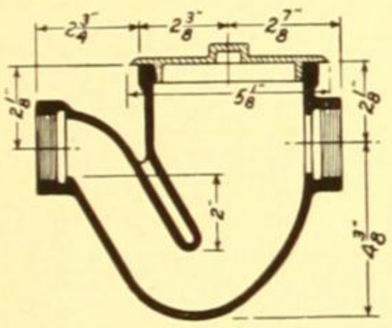
Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.



Z-1103

RESIDENCE AND APARTMENT HOUSE BATH TRAP — FIG. Z-1103
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$9.00	$13.70	$18.60	12

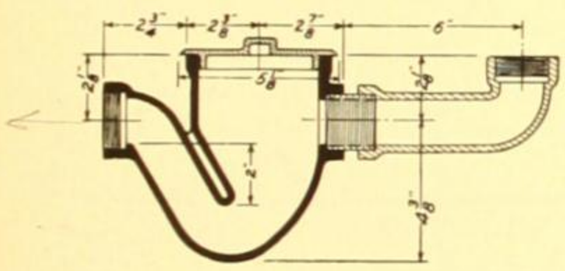


Z-1105

DWELLING HOUSE BATH TRAP — FIG. Z-1105
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$5.40	$8.30	$12.20	9

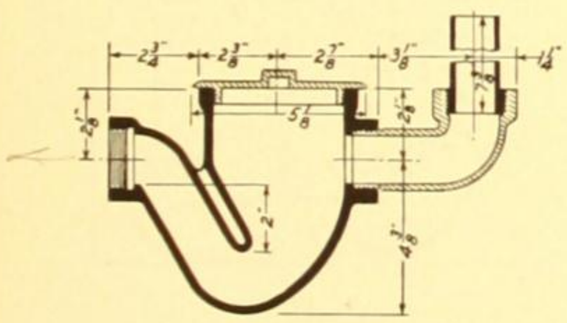
Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.



Z-1106

DWELLING HOUSE BATH TRAP — FIG. Z-1106
SELF-CLEANING

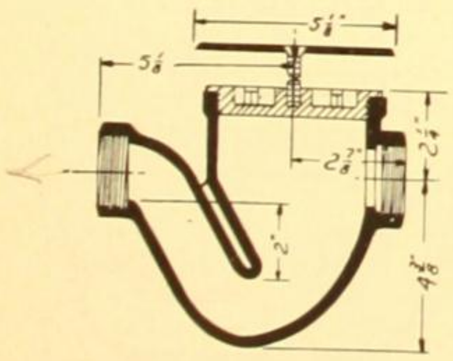
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$6.80	$11.50	$17.00	11



Z-1107

DWELLING HOUSE BATH TRAP — FIG. Z-1107
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$9.90	$14.80	$19.50	11



Z-1108

DWELLING HOUSE BATH TRAP — FIG. Z-1108
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$7.20	$10.40	$14.10	11

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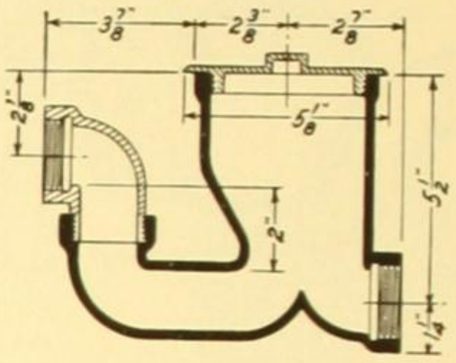
FIG. Z-1110 FEDERAL HOUSING ADJUSTABLE BATH TRAP
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 6.30	$ 9.90	$15.40	13

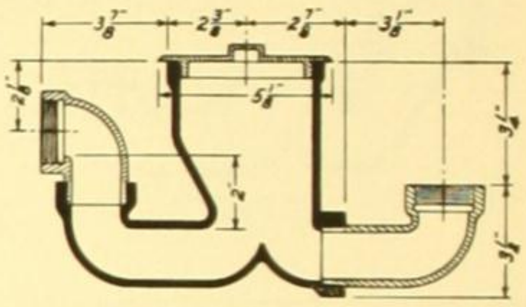


Z-1110

Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.

FIG. Z-1111 FEDERAL HOUSING ADJUSTABLE BATH TRAP
SELF-CLEANING

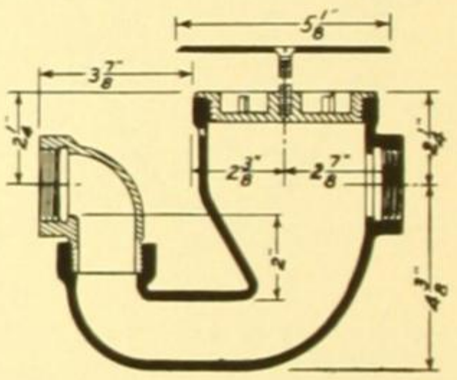
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.60	$12.40	$19.20	14



Z-1111

FIG. Z-1115 FEDERAL HOUSING ADJUSTABLE BATH TRAP
SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 8.70	$12.70	$17.90	13

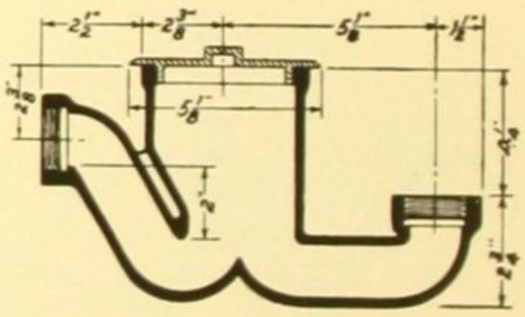


Z-1115

FIG. Z-1120 HOTEL TUB AND SHOWER TRAP
SELF-CLEANING, RAPID FLOWING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	$ 8.30	$12.60	$20.80	20

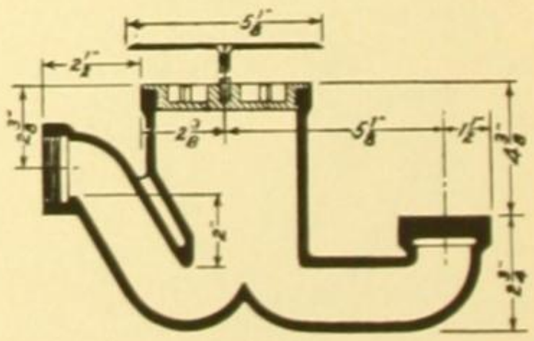
Designed especially to carry off drainage discharge rapidly with minimum fouling. Incorporates same features as in Z-1100.



Z-1120

FIG. Z-1121 HOTEL TUB AND SHOWER TRAP
SELF-CLEANING, RAPID FLOWING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	$10.00	$14.80	$22.70	20



Z-1121

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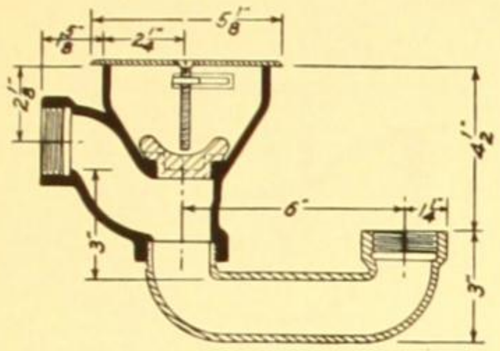
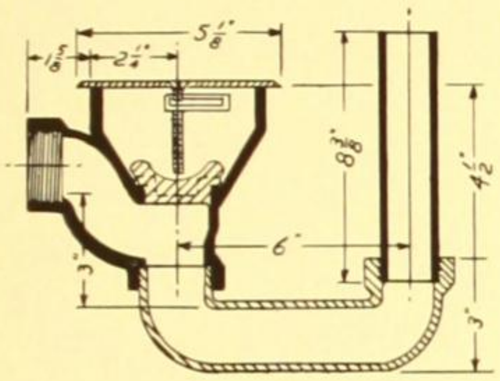

Z-1125

COLLECTIVE DWELLINGS BATH TRAP — FIG. Z-1125
UNIVERSAL ADJUSTMENT

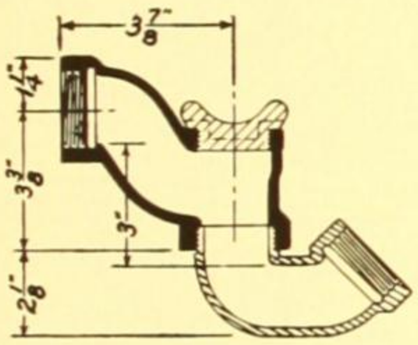
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 5.40	$10.70	$16.80	7

Adjustable inlet—swivel return bend; any lateral direction. Adjustable outlet—any lateral direction. Adapters supplied for lead or soil pipe.


Z-1126

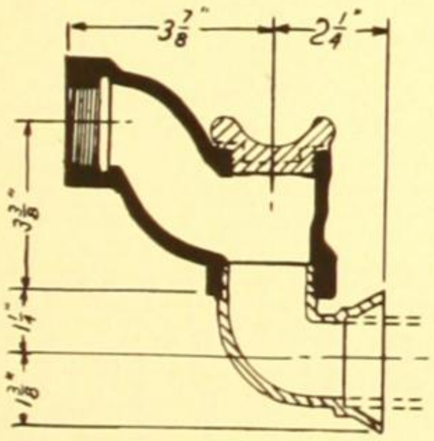
COLLECTIVE DWELLINGS BATH TRAP — FIG. Z-1126
UNIVERSAL ADJUSTMENT

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 8.60	$14.20	$18.90	8


Z-1127

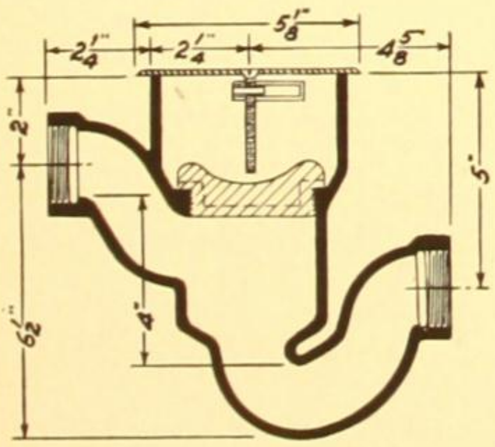
COLLECTIVE DWELLINGS BATH TRAP — FIG. Z-1127
UNIVERSAL ADJUSTMENT

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$4.20	$8.30	$12.90	4


Z-1128

COLLECTIVE DWELLINGS BATH TRAP — FIG. Z-1128
UNIVERSAL ADJUSTMENT

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 5.90	$ 9.00	$15.00	3


Z-1130

HOSPITAL BATH TRAP — FIG. Z-1130
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.60	$14.40	$24.10	9

Severest siphonic pull will not drain water seal. Self-cleansing of all inside walls. Water seal guards cleanout plug against foul odors.

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FIG. Z-1133 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.50	$14.40	$24.10	9

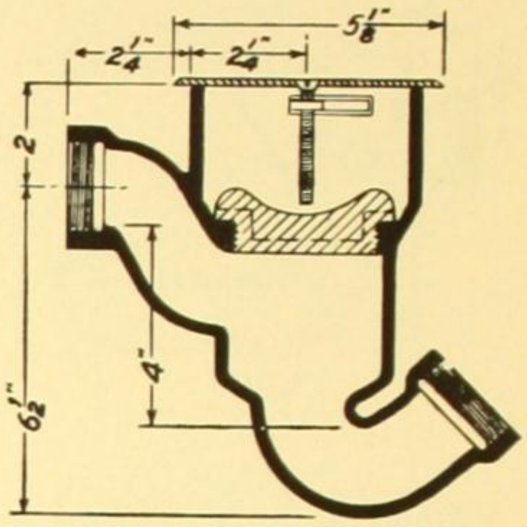

Z-1133

FIG. Z-1135 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.20	$16.00	$25.50	6

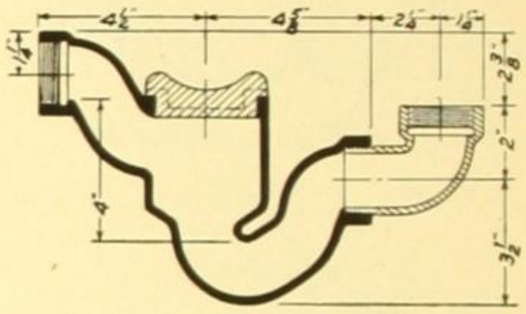

Z-1135

FIG. Z-1138 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.20	$16.00	$25.50	6

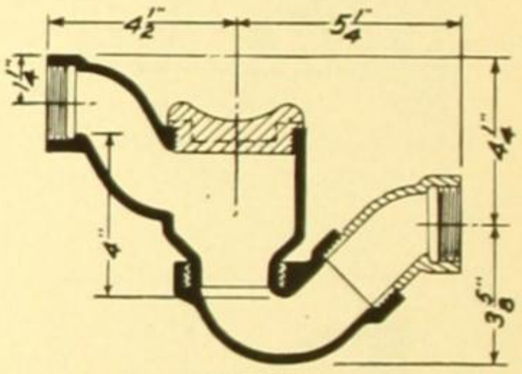

Z-1138

FIG. Z-1140 HOSPITAL ADJUSTABLE BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 10.10	$19.60	$34.30	10

Severest siphonic pull will not drain water seal. Self-cleansing of all inside walls. Water seal guards cleanout plug against foul odors.

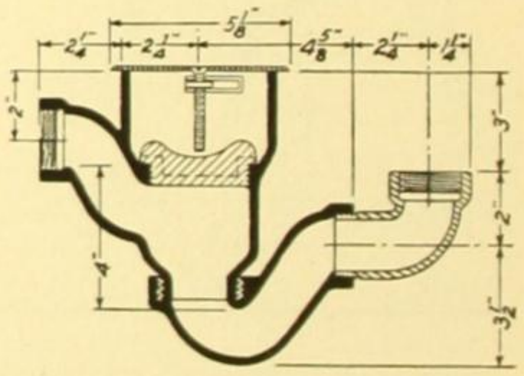
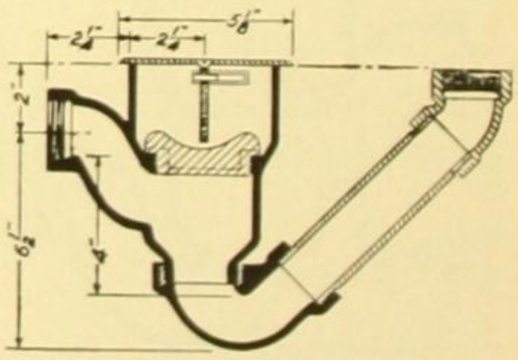

Z-1140

FIG. Z-1143 HOSPITAL ADJUSTABLE BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$10.10	$19.60	$34.30	11


Z-1143

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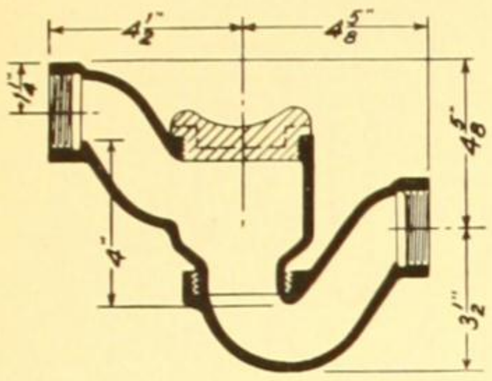


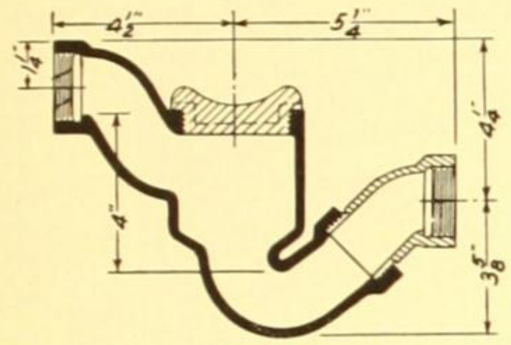
Z-1145

(Continued from preceding page)

HOSPITAL ADJUSTABLE BATH TRAP — FIG. Z-1145

SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 7.50	$16.20	$25.60	6



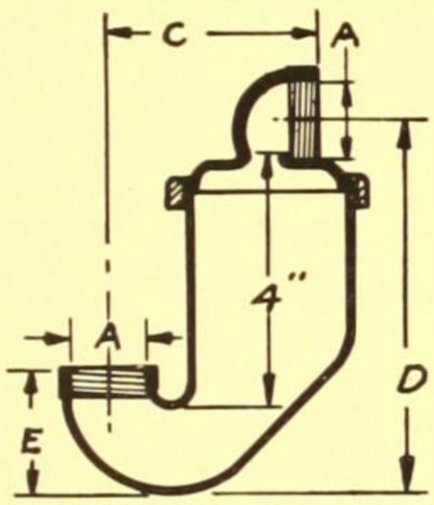
Z-1148

HOSPITAL ADJUSTABLE BATH TRAP — FIG. Z-1148

SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	$ 8.70	$18.60	$29.50	6

Z-1160

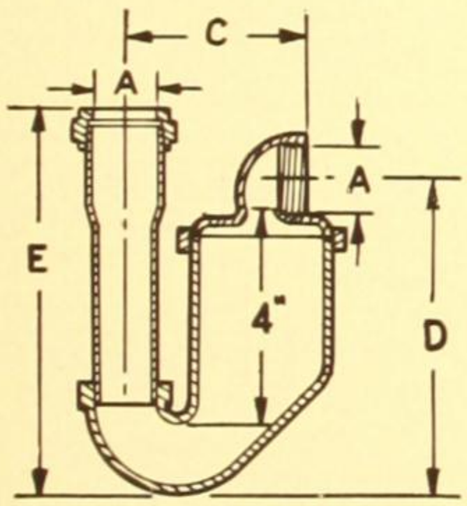


I.P.S. Inlet and Outlet

RESEALING LAVATORY TRAP — FIG. Z-1160

Pipe Size A	C	D	E	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1¼"	3⅝"	6⅛"	2"	$10.20	$12.90	3
1½"	4¼"	6⅝"	2½"	11.70	15.00	4

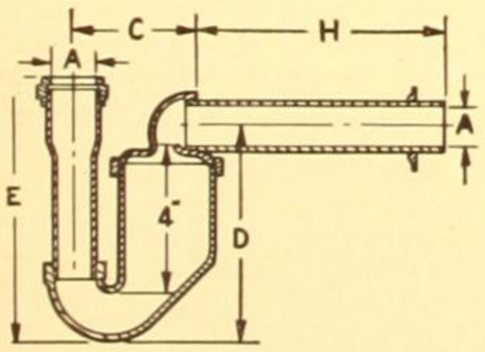
Severest siphonic pull will not drain water seal. Ground face union connection permits disconnection at any time with free access to trap or waste line. Self-cleansing of inside walls. Eliminates need for separate vent.



Z-1161—Tubing Inlet and I.P.S. Outlet

RESEALING LAVATORY TRAP — FIG. Z-1161

Pipe Size A	C	D	E	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1¼"	3⅝"	6⅛"	7"	$11.70	$15.00	3½
1½"	4¼"	6⅝"	7⅜"	13.50	17.40	4½



Z-1163—Tubing Inlet and Outlet

RESEALING LAVATORY TRAP — FIG. Z-1163

Pipe Size A	C	D	E	H	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1¼"	3⅜"	6⅛"	7"	7¾"	$13.50	$16.20	4
1½"	4¼"	6⅝"	7⅜"	7¾"	16.20	19.50	5

(Continued on following page)

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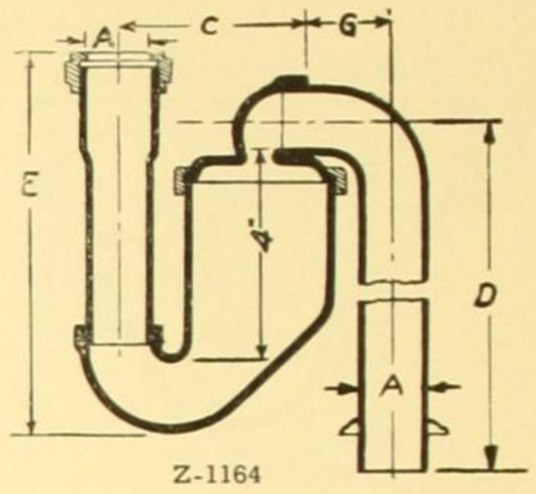
FIG. Z-1164 RESEALING LAVATORY TRAP

Pipe Size A	C	D	E	G	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1¼″	3⅝″	25″	7″	2″	$13.50	$17.40	4
1½″	4¼″	25″	7⅜″	2″	16.20	21.20	5



Z-1164

FIG. Z-1167 ADJUSTABLE BRONZE BATH TRAP

		D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
Pipe Size A—1¼″ Iron Pipe, I.P.S. Inlet and Outlet	$6.00	5¾″—8½″	2″—4¾″	5
Pipe Size A—1½″ Iron Pipe, I.P.S. Inlet and Outlet	6.60	5¾″—8½″	2″—4¾″	5

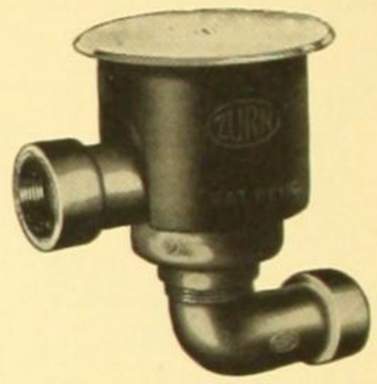

Z-1167, Z-1167-1

FIG. Z-1167-1 ADJUSTABLE BRONZE BATH TRAP

		D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
Pipe Size A—1¼″ Iron Pipe—With Shield, I.P.S. Inlet and Outlet	$6.80	5¾″—8½″	2″—4¾″	7
Pipe Size A—1½″ Iron Pipe—With Shield, I.P.S. Inlet and Outlet	7.40	5¾″—8½″	2″—4¾″	7

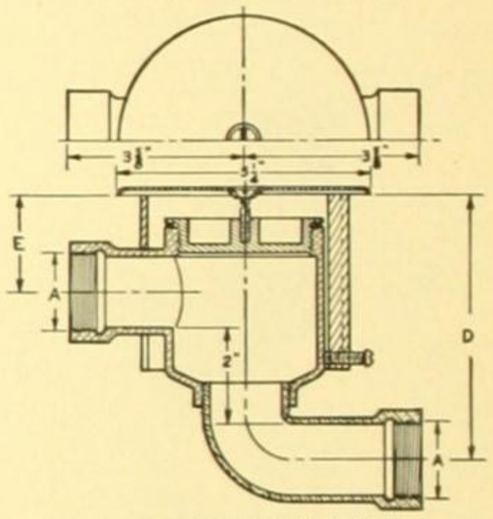

Z-1167, Z-1167-1

FIG. Z-1167L ADJUSTABLE BRONZE BATH TRAP

		D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
Pipe Size A—1¼″ Lead Pipe, Hub Inlet and Outlet	$6.00	5¾″—8½″	2″—4¾″	5
Pipe Size A—1½″ Lead Pipe, Hub Inlet and Outlet	6.60	5¾″—8½″	2″—4¾″	5

FIG. Z-1167L-1 ADJUSTABLE BRONZE BATH TRAP

		D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
Pipe Size A—1¼″ Lead Pipe—With Shield, Hub Inlet and Outlet	$6.80	5¾″—8½″	2″—4¾″	7
Pipe Size A—1½″ Lead Pipe—With Shield, Hub Inlet and Outlet	7.40	5¾″—8½″	2″—4¾″	7

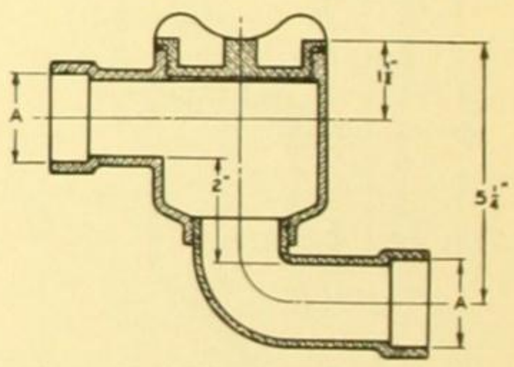
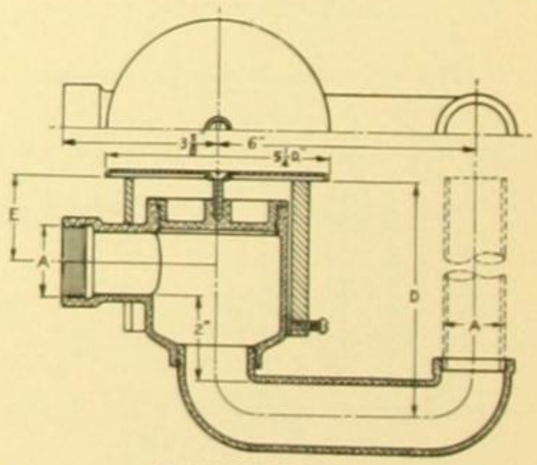

Z-1167L, Z-1167L-1

FIG. Z-1168 ADJUSTABLE BRONZE BATH TRAP

		Approx. Wt. Lbs.
Pipe Size A—1¼″ Iron Pipe Outlet, Tubing Inlet	$7.20	6
Pipe Size A—1½″ Iron Pipe Outlet, Tubing Inlet	7.80	6

FIG. Z-1168-1 ADJUSTABLE BRONZE BATH TRAP

		Approx. Wt. Lbs.
Pipe Size A—1¼″ Iron Pipe Outlet, Tubing Inlet—With Shield	$8.00	7
Pipe Size A—1½″ Iron Pipe Outlet, Tubing Inlet—With Shield	8.60	7


Z-1168, Z-1168-1

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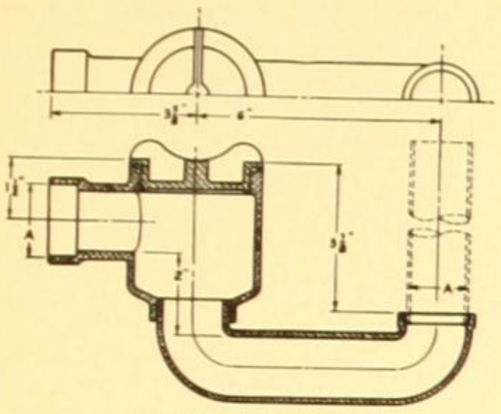


Z-1168L, Z-1168L-1

ADJUSTABLE BRONZE BATH TRAP — FIG. Z-1168L

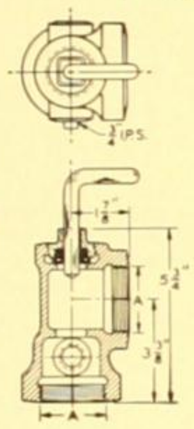
		Approx. Wt. Lbs.
Pipe Size A—1¼" Lead Pipe, Hub Outlet—Tubing Inlet	$7.20	6
Pipe Size A—1½" Lead Pipe, Hub Outlet—Tubing Inlet	7.80	6

ADJUSTABLE BRONZE BATH TRAP — FIG. Z-1168L-1

		Approx. Wt. Lbs.
Pipe Size A—1¼" Lead Pipe, Hub Outlet, Tubing Inlet—With Shield	$8.00	7
Pipe Size A—1½" Lead Pipe, Hub Outlet, Tubing Inlet—With Shield	8.60	7

INTERCEPTORS . . . Pages 63 to 65

STANDARD MODEL CAST IRON GREASEPTOR With Patented Flow Control Tee — FIG. Z-1170



Size No.	**G.P.M. Rated Capacity	**Lbs. Grease Capacity
100	4	8
200	6	12
300	9	18
400	14	28
400LT	22	44
500	20	40
600	25	50
600LT	30	60
700	40	80

Z-1170—Standard Greaseptor

Z-1171—Deluxe—Cover Removable With Basket

Flow Control Tee

Furnished on all Sizes and Types.

**Flowrate and grease capacities listed are with controlled flow, at 90% rated average efficiency as tested in accordance with War Department Standard Specifications for Temporary Housing, 8000 E, P-13, addenda No. 2— Specifications for Mobilization Construction Equipment P. E. 620 and War Dept. Corps of Engineers Tentative Specification P. E. 620, May 27, 1944.

Size No.	J I.P.S.	B	B′	C	D	E	A I.P.S.	Sani-Coated
100	1½"*, 2"	17¾"	9¾"	3¾"	10"	7¼"	2"	$ 37.50
200	1½"*, 2"	19¼"	12⅛"	3⅝"	11⅛"	8⅛"	2"	52.50
300	1½"*, 2"	22"	14¼"	3¾"	11¾"	8½"	2"	90.00
400	1½"*, 2", 3"	24"	17"	3¾"	13¼"	8¾"	2"*, 3"	124.50
400LT	1½"*, 2"	21⅜"	14¼"	2¾"	12¼"	2¾"	2"*	199.50
500	1½"*, 2", 3", 4"	27⅜"	17½"	4½"	14¾"	10¼"	2", 3", 4"	184.50
600	1½"*, 2", 3", 4"	30¾"	20¼"	4⅜"	16⅝"	12⅛"	2", 3", 4"	291.00
600LT	1½", 2", 3"	26¼"	17⅞"	3⅜"	12¾"	3⅜"	2", 3"	306.00
700	2"*, 3", 4"	32½"	23"	4¼"	18½"	14"	2"*, 3", 4"	505.50

Approx. Wt. Lbs. 100—71, 200—91, 300—139, 400—188, 500—216, 600—331, 700—464, 400LT—135, 600LT—230.

Soil pipe connections available

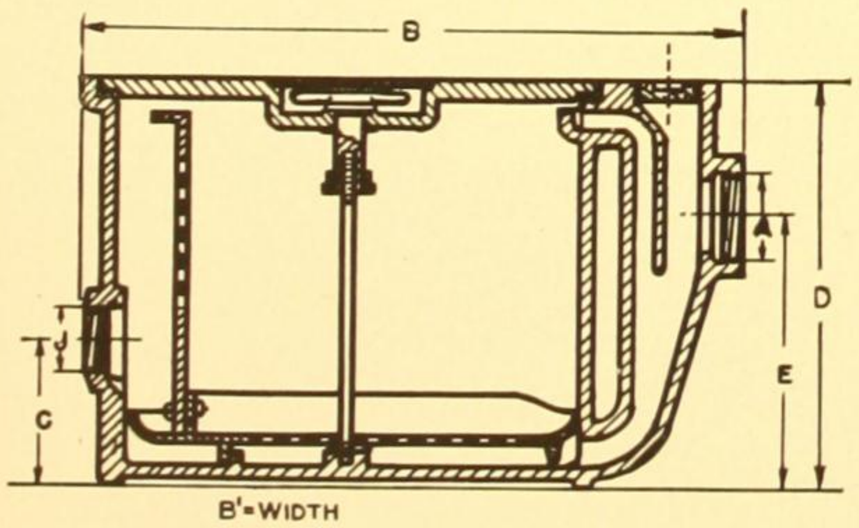
Larger sizes for special applications available to specification.

*Recommended I. P. Sizes.

Has vertical baffle and horizontal basket baffle, easily removed for cleaning. Baffles not attached to cover.

Assures free flowing drainage through pipe lines at all times by intercepting, separating, accumulating and recovering grease from waste water lines.

Flow Control Tee furnished with every greaseptor; its use guarantees foolproof operation and maximum efficiency.



Z-1170, Z-1171—C.I. Greaseptors-Dimensional Detail

DE LUXE MODEL CAST IRON GREASEPTOR With Patented Flow Control Tee — FIG. Z-1171

Size No.	A I.P.S.	B	B′	C	D	E	J I.P.S.	Sani-Coated
100	1½"*, 2"	17¾"	9¾"	3¾"	10"	7¼"	2"	$ 60.00
200	1½"*, 2"	19¼"	12⅛"	3⅝"	11⅛"	8⅛"	2"	75.00
300	1½"*, 2"	22"	14¼"	3¾"	11¾"	8½"	2"	120.00
400	1½"*, 2", 3"	24"	17"	3¾"	13¼"	8¾"	2"*, 3"	157.50
500	1½"*, 2", 3", 4"	27⅜"	17½"	4½"	14¾"	10¼"	2"*, 3"	225.00

Approx. Wt. Lbs. 100—67½, 200—86½, 300—132, 400—178½, 500—205.

Soil pipe connections available

Larger sizes for special applications available to specification.

*Recommended I. P. Sizes.

Has integral vertical baffle, horizontal basket baffle and cover, easily removed for cleaning. Baffles are attached to cover.

ADD FOR PORCELAIN ENAMEL FINISH — FIGS. Z-1170 AND Z-1171

Size No.	Inside or Outside	Size No.	Inside and Outside
100	$ 54.00	100	$ 72.00
200	60.00	200	84.00
300	84.00	300	120.00
400	111.00	400	187.50
400LT	111.00	400LT	187.50
500	204.00	500	294.00
600	270.00	600	345.00
600LT	270.00	600LT	345.00
700	285.00	700	390.00

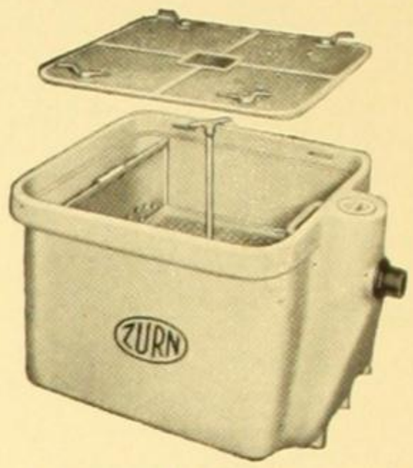
FIG. Z-1171

"VGE" GREASEPTOR WITH Flow Control Tee

Size No.	*G.P.M. Rated Capacity	*Lbs. Grease Capacity	A I.P.S.	B	B'	C	D	E	J I.P.S.	V.G.E.
350—VGE	12	24	2"	25½"	16½"	4¼"	12⅛"	9"	2"	$124.50
450—VGE	18	36	2"	29"	19½"	4 11/16"	15¼"	9⅞"	2"	184.50
550—VGE	25	50	2"	33"	22½"	4 15/16"	18⅞"	12⅞"	2"	291.00

Approx. Wt. Lbs. 350—76, 450—128, 550—171.

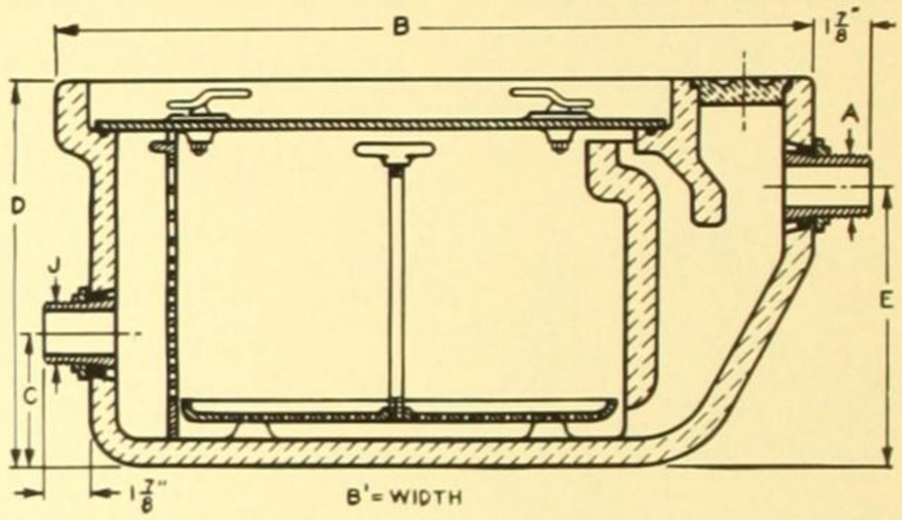
*At 90% rated average efficiency as tested in accordance with War Department Standard Specifications for Temporary Housing 8000 E, P-13, Addenda No. 2—Specifications for Mobilization Construction Equipment P. E. 620, and War Dept. Corps of Engineers Tentative Specification P. E. 620, May 27, 1944.



Z-1171—V.G.E. Greaseptor. I.P.S. Inlet and Outlet

Made of Vitreous Glazed Earthenware. Impervious to thermal shock. Easily cleaned inside and out because of smooth surfaces; therefore thoroughly sanitary. Especially desirable for hospital and public eating facilities.

Flow Control Tee furnished with every "VGE" greaseptor —see details on page 63.

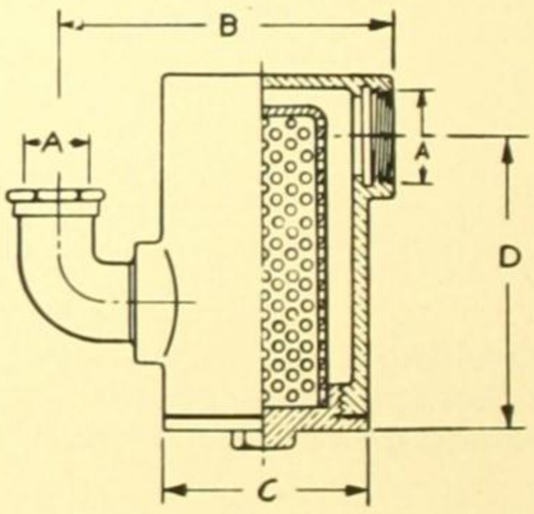


Z-1171—V.G.E. Greaseptor. I.P.S. Inlet and Outlet

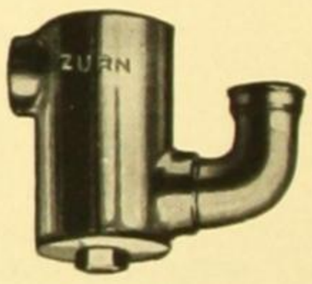
FIG. Z-1175 HAIR INTERCEPTOR

Pipe Size A	B	C	D	Coated (DC)	All Bronze Pol.	All Bronze C. P.	Approx Wt. Lbs
1¼-1½"	6¾"	3¾"	5⅝"	$17.10	$36.00	$40.00	8

For barber shops, beauty parlors, clubs, dormitories, swimming pools, etc.; for sinks and lavatories in industrial or commercial usage. Perforated brass basket, removable for easy cleaning.



Slip Joint Tubing Inlet, I.P.S. Outlet

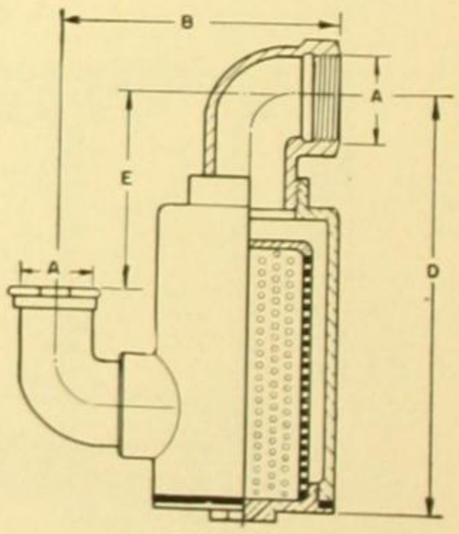


Z-1175

FIG. Z-1175A HAIR INTERCEPTOR, Adjustable Outlet

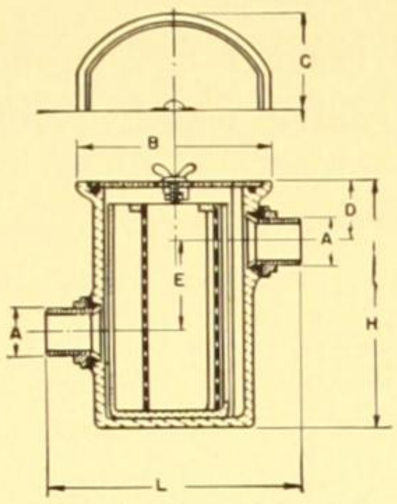
Pipe Size A	B	D	E	Coated (DC)	All Bronze Pol.	All Bronze (CP)	Approx. Wt. Lbs.
1¼-1½"	6 1/16"	9½"	5 3/16"	$17.10	$36.00	$40.00	9

Same service as Z-1175.



Z-1175A
Slip Joint Tubing Inlet, I.P.S. Adjustable Outlet

Z-1180, Size No. 1



I.P.S. Inlet and Outlet

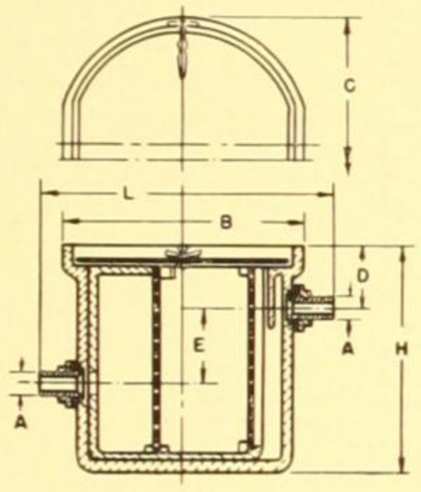
SOLIDS INTERCEPTOR, Size No. 1 — FIG. Z-1180

Pipe Size A	B	C	D	E	H	L	Capacity	
2″	8⅛″	8¾″	2⅝″	4⅛″	11″	9¾″	158.8 cu. in.	$60.00

Approx. Wt. Lbs. 2″—19.

Available in Cast Iron—Prices and Dimensions on Request.

Made of Vitreous China. Brass screen. Aluminum basket removable for easy cleaning. For hospital and dental sinks and laboratories where waste water contains plaster, metal, or abrasives.



Z-1180, Size No. 2, I.P.S. Inlet and Outlet

SOLIDS INTERCEPTOR, Size No. 2 — FIG. Z-1180

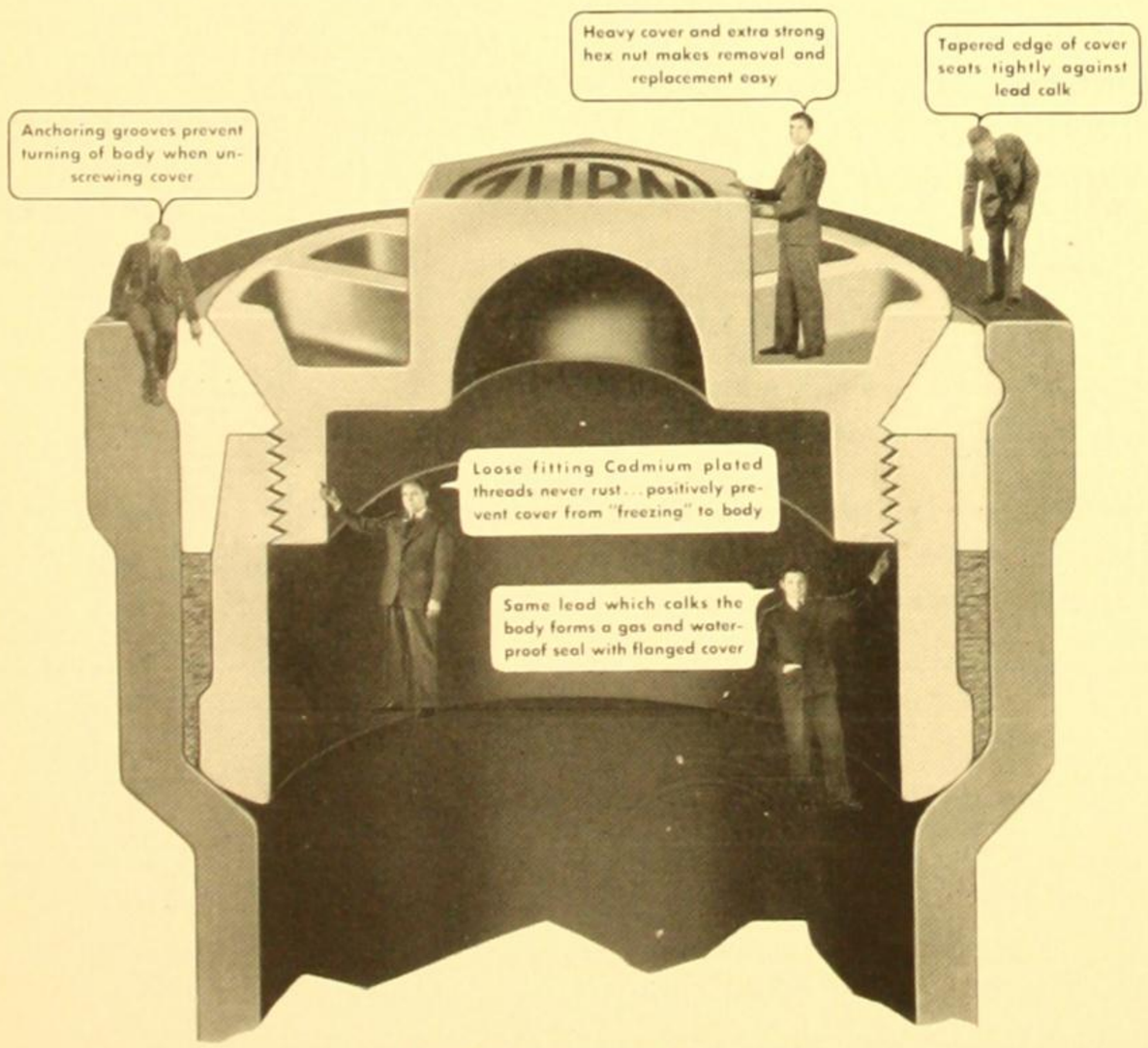
Pipe Size A	B	C	D	E	H	L	Capacity		Approx. Wt. Lbs.
2″	19¾″	19¾″	5 1/16″	5 11/16″	18 1/16″	22″	1964.5 cu. in.	$135.00	135

Available in Cast Iron—Prices and Dimensions on Request.

Made of Vitreous Glazed Earthenware. Impervious to thermal shock. Brass screen. Aluminum basket removable for easy cleaning. Same service as Z-1180, Size No. 1.

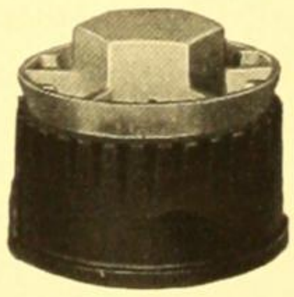
CLEANOUTS . . . Pages 65 to 67

SUPREMO PERFECT SEAL CLEANOUTS AND CLEANOUT TEES



Z-1300—Perfect Seal Cleanout Patented

SUPREMO PERFECT SEAL CLEANOUT — FIG. Z-1300



Z-1300

Pipe Size	With Rust-proofed C. I. Cover	With Bronze Cover	All Bronze	Approx. Wt. Lbs.
2″	$ 1.60	$ 2.70	$ 4.60	2
3″	2.00	3.30	5.80	4
4″	2.30	4.00	6.80	5
5″	4.80	7.60	13.20	6
6″	6.80	10.20	19.90	8
8″	13.80	19.90	25.80	13
10″	21.60	28.50	36.80	20
12″	30.80	40.60	52.40	28

For all soil pipe cleanout openings in every type of building. Provides positive gas-tight and water-tight connection, yet won't stick in removal.

We suggest the following specifications for consideration in adopting these products to meet plumbing codes written around the old style brass and iron "Trap Screw Ferrule" idea:

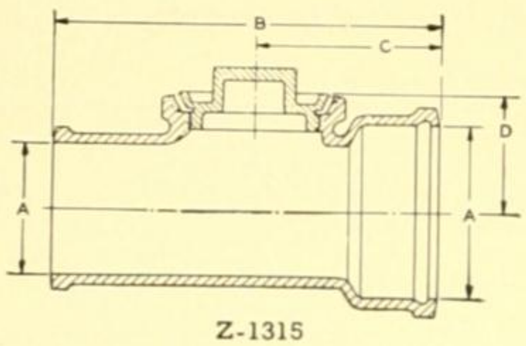
"Where a joint is made by a metal to metal contact, equivalent to a ground joint, the plug may be of extra heavy cast iron rustproofed after the threads are cut, and the contact must be made with a non-corrosive metal."

(Continued on following page)

SUPREMO PERFECT SEAL CLEANOUTS (Continued)

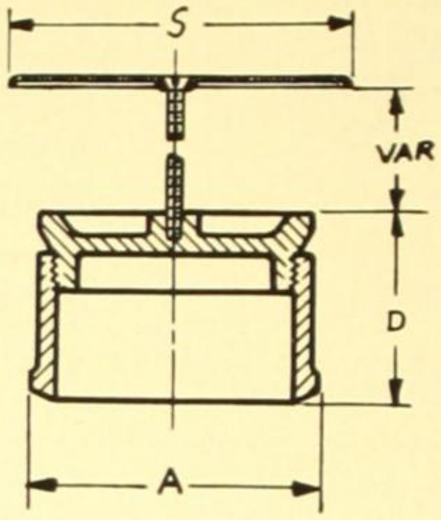
FIG. Z-1305 Perfect Seal Cleanout, With Flush Cover

Pipe Size	With Rust-Proofed C. I. Cover	With Bronze Cover	All Bronze	Approx. Wt. Lbs.
2"	$ 1.60	$ 2.70	$ 4.60	2
3"	2.00	3.30	5.80	3
4"	2.30	4.00	6.80	5
5"	4.80	7.60	13.20	7
6"	6.80	10.20	19.90	8
8"	13.80	19.90	25.80	13
10"	21.60	28.50	36.80	20
12"	30.80	40.60	52.40	28



Z-1315

FIG. Z-1310 PERFECT SEAL CLEANOUT WITH RUST-PROOFED C. I. COVER, BRONZE ACCESS PLATE AND SCREW



Z-1310

Pipe Size A	Plate Diam. S	D	Pol.	C. P.	Approx. Wt. Lbs.
2"	5"	1½"	$3.10	$4.60	3
3"	5"	2½"	3.50	5.00	4
4"	7"	2¾"	4.50	6.00	7
5"	7"	2¾"	7.00	8.50	9
6"	7"	3"	9.00	10.50	10

Provides a smooth flush finish for exposed locations.

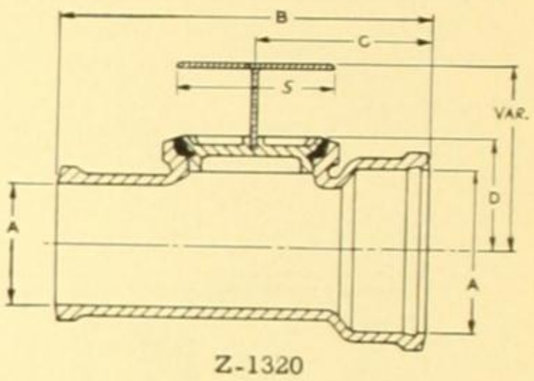
FIG. Z-1315 SUPREMO PERFECT SEAL CLEANOUT TEE WITH RAISED COVER

Pipe Size A	With Rust-Proofed C. I. Plug	With Bronze Plug	Approx. Wt. Lbs.
2"	$ 4.40	$ 5.30	7
3"	5.20	6.40	15
4"	6.10	7.70	16
5"	10.10	14.00	22
6"	13.80	16.50	35

Z-1315

A	B	C	D
2"	10"	4⅜"	3"
3"	12"	5½"	3⅛"
4"	12"	5¾"	3½"
5"	13"	6½"	4¼"
6"	14"	7 1/16"	4¾"

Z-1320 SUPREMO PERFECT SEAL CLEANOUT TEE WITH BRONZE ACCESS PLATE AND SCREW; RUST-PROOFED CAST IRON COVER.



Z-1320

Pipe Size A	Plate Diam.	Pol.	C. P.	Approx. Wt. Lbs.
2"	5"	$ 5.50	$ 6.80	8
3"	5"	6.00	7.50	16
4"	7"	7.50	9.00	18
5"	7"	11.00	12.50	24
6"	7"	14.20	15.70	37

Z-1320

A	B	C	D	S
2"	10"	4⅜"	3"	5¼"
3"	12"	5½"	3⅛"	5¼"
4"	12"	5¾"	3½"	7¼"
5"	13"	6½"	4¼"	7¼"
6"	14"	7 1/16"	4¾"	7¼"

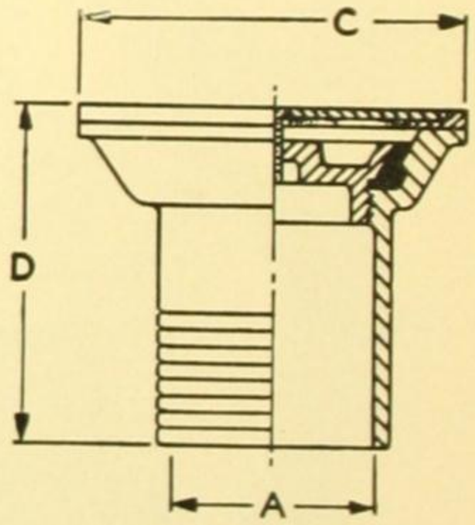
Z-1326

Z-1315, Z-1320 For all installations of cleanout tees, vertical or horizontal, in any type of building.

FIG. Z-1326 SUPREMO PERFECT SEAL FLOOR LEVEL CLEANOUT

Pipe Size A	C	D	Polished	C. P.	Approx. Wt. Lbs.
2"	5"	8¼"	$ 6.10	$ 7.80	7
3"	5"	8¼"	7.80	9.50	8
4"	6"	8¼"	9.50	11.30	12
5"	8"	8¼"	14.70	18.20	20
6"	8"	8¼"	18.40	21.90	26

For use in industrial plants and other buildings where cleanout openings occur in heavy traffic open areas. Adjustable top compensates for variations in floor surface.

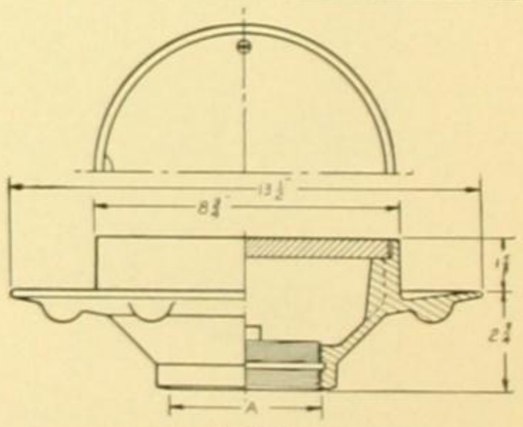


Caulk Connection

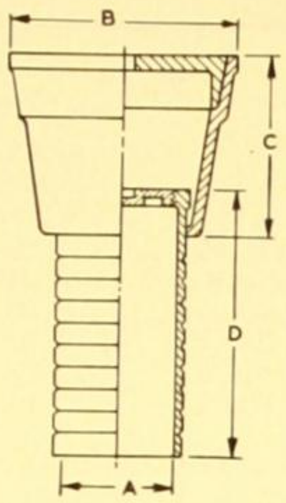
FIG. Z-1327 AREAWAY CLEANOUT

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Cover Coated (CB)	Bronze Rim and Cover Galv. (GB)	Approx. Wt. Lbs.
2"	$15.00	$25.20	$57.60	$25.50	$37.80	24
3"	16.50	27.00	59.20	27.00	39.60	25
4"	18.00	28.80	60.80	28.50	41.40	26
Clamping collar, add	2.30	3.60	4.80	2.30	3.60	

For cleanouts in open areaways or as access to horizontal drainage lines.


Z-1327

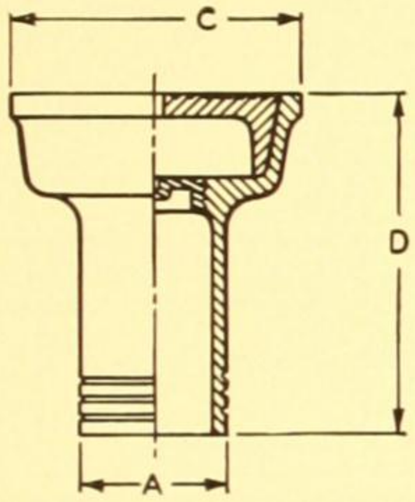
Z-1329



HEAVY DUTY FLOOR LEVEL CLEANOUT — FIG. Z-1329

Pipe Size A	B	C	D	Coated (DC)	Add for Galv. Housing	Approx. Wt. Lbs.
2″	6¾″	4¾″	8″	$ 8.60	$2.30	17
3″	6¾″	4¾″	8″	9.60	2.30	18
4″	6¾″	5½″	8″	10.70	2.30	21
5″	8¾″	5½″	8″	13.80	3.50	28
6″	8¾″	5½″	8″	14.40	3.50	36
Cleanout housing only						
2-3-4				6.40	2.30	
5-6				8.00	3.50	

For cleanout openings occurring in open areas and subject to heavy traffic. Adjustable top eliminates need for accuracy of floor levels.

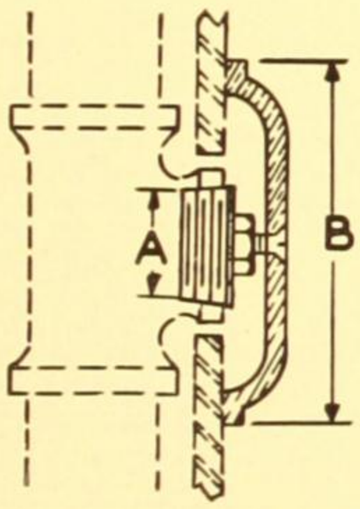


Z-1329-2

TRAFFIC CLEANOUT EXTENSION — FIG. Z-1329-2

Pipe Size A	C	D	Cast Iron Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2″	6¾″	8″	$ 5.90	$ 8.70	15
3″	6¾″	8″	7.20	10.80	16
4″	6¾″	8″	7.80	11.70	18
5″	on request		9.90	13.70	25
6″	8¾″	8″	11.70	17.60	30

Provides access to drain lines through factory floor. Cleanout plug protected by heavy deep flange, non-slip cover.



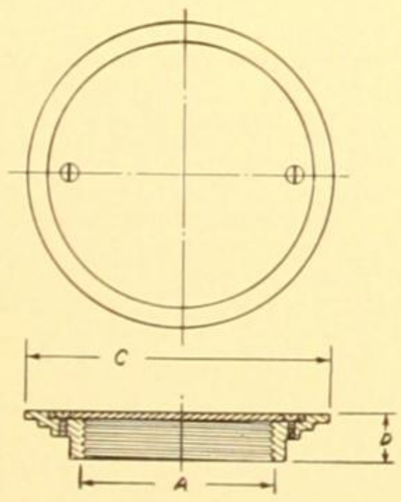
Z-1370

WALL ACCESS CLEANOUT — FIG. Z-1370

Pipe Size A	B	Polished Bronze ¼″ Depth	1″	2″	3″	4″	5″	6″	Approx. Wt. Lbs.
1½″	5″	$ 5.30	$ 8.80	$16.30	$17.90	$19.20	$20.80	$23.20	4
2″	5″	5.90	9.30	16.70	18.30	19.70	21.30	23.70	5
3″	5″	8.00	10.30	17.40	18.80	20.20	21.80	29.60	6
4″	7″	12.20	12.60	18.10	19.40	20.80	22.80	35.50	8
5″	7″	17.60	17.90	26.20	28.20	30.10	33.90	51.20	11
6″	7″	20.30	20.50	30.70	33.60	35.80	37.40	54.70	15

Add for C. P.—15%
Add for W. M.—50%

Furnished with bronze cleanout plug tapped to accommodate bronze wall plate of desired depth. Fitting not furnished.



Z-1380

ACCESS CLEANOUT — FIG. Z-1380

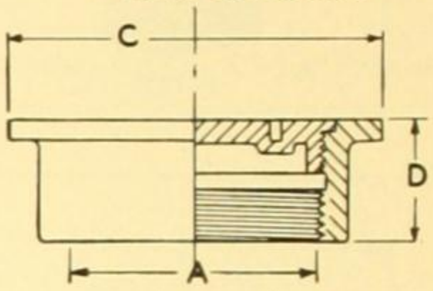
Pipe Size A	C	D	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
2″	5½″	1″	$ 5.80	$ 7.70	3
3″	5½″	1″	6.70	8.60	4
4″	6¾″	1″	7.70	9.60	5
5″	8″	1″	9.60	11.50	6
6″	9½″	1″	11.50	13.40	8
8″	11½″	1″	14.40	16.30	12

MISCELLANEOUS . . . Pages 68 to 69

FIG. Z-1381, Z-1382 DECK PLUG—NON-SLIP

Pipe Size A	C	D	Machine Finish	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
2"	4"–4¾"*	1¼"–3⅛"*	$ 7.20	$ 9.40	$11.40	3
3"	4¾"–6"*	1½"–3⅛"*	11.20	13.60	16.10	4
4"	6"–7⅜"*	1½"–3¼"*	13.20	16.40	18.90	6
5"	9⅜"	1¾"–3½"*	21.60	25.20	28.60	10
6"	9⅜"	1¾"–3½"*	33.60	37.20	41.20	12
8"**	11"	2"	60.00	72.00	80.00	18

Z-1382
Caulk Connection



Z-1381—I.P.S. Connection

Provides floor cleanout where flush finish with floor level is desired. Non-slip safety top for exposed installations.

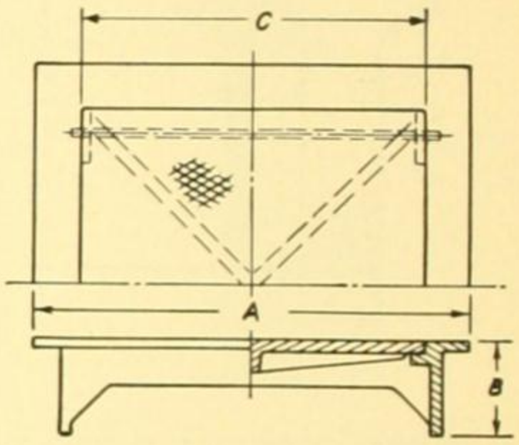
*Caulk dimensions
**Available I.P.S. only
Note: specify Z-1382 for caulk connection

FIG. Z-1385 ACCESS BOX—HINGED COVER

A	B	C	Coated (DC)	Galv. (G)	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
6x6"	1¾"	4"	$1.80	$ 3.10	$ 6.40	$ 8.60	3
8x8"	1¾"	6"	2.40	4.10	8.80	11.30	5
10x10"	1¾"	7"	6.60	11.20	18.00	21.50	7
12x12"	1¾"	10"	9.00	15.10	24.00	29.00	11

Non-slip carborundum surface—same price as chrome (C.P.)

Floor or Wall access to valves, pipe-lines, shut-off cocks, hose connections.



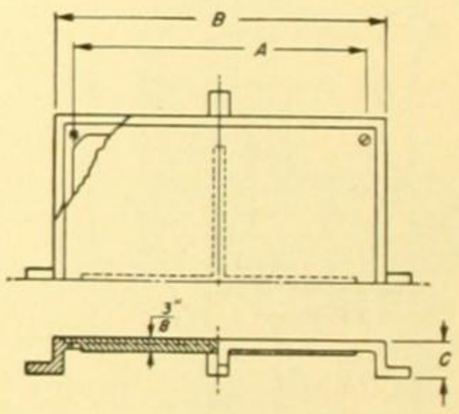
Z-1385

FIG. Z-1385-1 ACCESS BOX—SECURED COVER

A	B	C	Coated (DC)	Galv. (G)	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
6x6"	7x7"	1"	$1.80	$ 3.10	$ 5.40	$ 7.60	3
8x8"	9x9"	1"	2.40	4.10	7.80	10.30	5
10x10"	11x11"	1"	5.80	10.20	16.20	19.70	6½
12x12"	13x13"	1"	8.20	14.10	21.10	26.10	10

Non-slip carborundum surface—same price as chrome (C.P.)

Floor or Wall access to valves, pipe-lines, shut-off cocks, hose connections.
Anchorage Lugs assure secure installation.
Full size opening for Handhole.

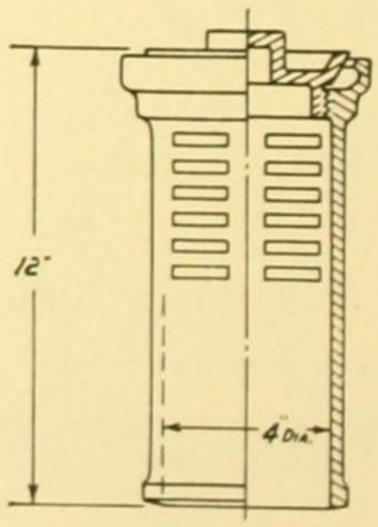


Z-1385-1

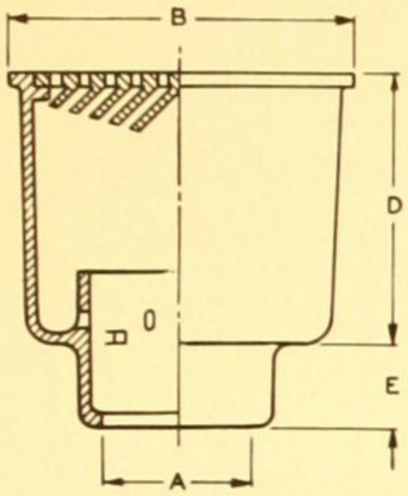
FIG. Z-1386 ACCESS BOX AND VENT

Pipe Size	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
4"	$8.40	$14.10	17

Relief vent on drainage system. Will prevent entry of sticks, etc., without retarding access of ample free air. Removable access cleanout.



Z-1386

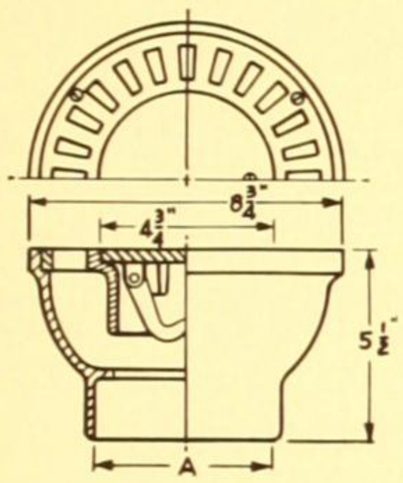


Z-1386A—Caulk Connection

VENT BOX — FIG. Z-1386A

Pipe Size A	B	D	E	Coated (DC)	Galv. (G)	Bronze Grate	Approx. Wt. Lbs.
4″	6¾″ Sq.	4″	2″	$ 7.50	$13.50	$22.50	25

Unique cover design prevents insertion of large objects. Provides outside air to plumbing system or building interior.

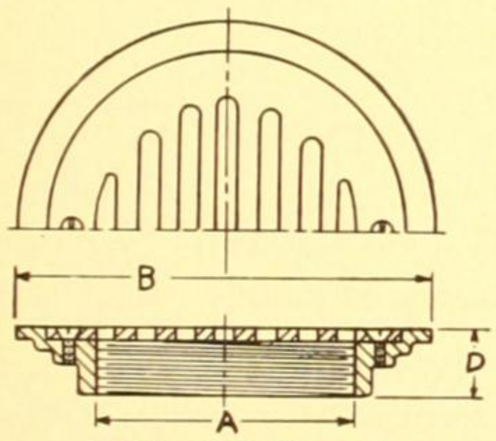


Z-1387—Caulk Connection

VENT BOX — FIG. Z-1387

Pipe Size A	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
4″	$7.50	$13.50	8

Consists of outside vent ring and secured center cleanout, removable only with special tool. Removable center plate allows cleaning. Same service as Z-1386A.



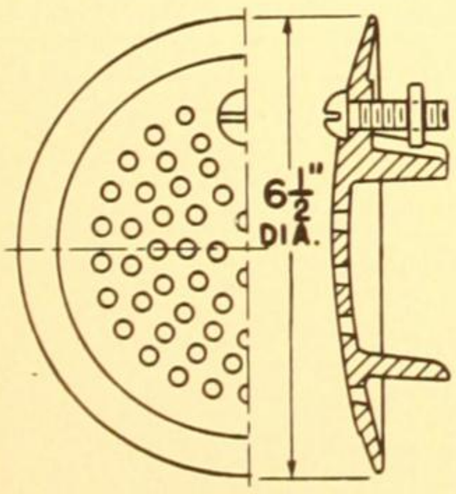
Z-1388—I.P.S. Connection

FRESH AIR INLET — FIG. Z-1388

Pipe Size A	B	D	All Bronze Pol.	All Bronze C. P.	Approx. Wt. Lbs.
3″	5½″	1″	$ 9.60	$12.80	5
4″	6¾″	1″	11.50	14.70	6
*4″	8″	1¾″	16.00	20.80	10
5″	8″	1″	20.80	25.00	15
6″	9½″	1″	23.00	30.70	18

*Denotes New York State Specification

For boiler rooms, garages, laundries.



Z-1389

FRESH AIR INLET — FIG. Z-1389

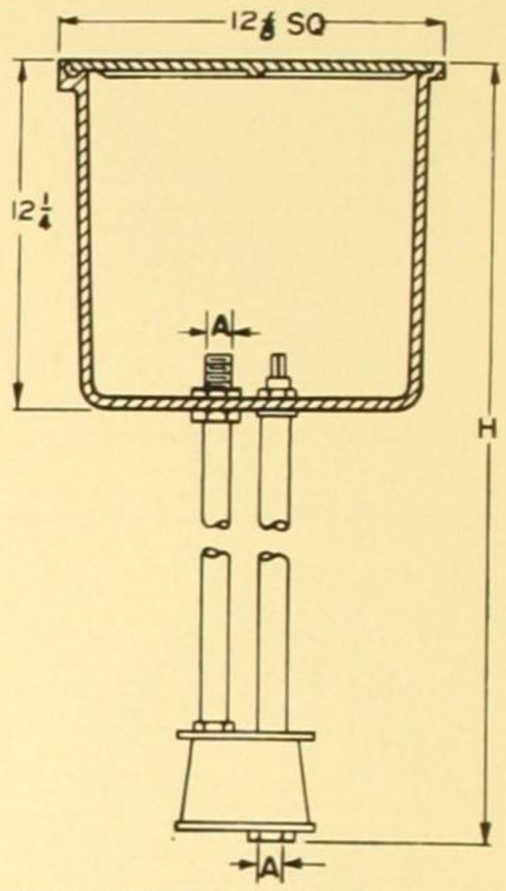
Pipe Size A	All Bronze Pol.	All Bronze C. P.	Approx. Wt. Lbs.
4″	$4.80	$8.00	2

Provides simple and secure means for covering outside vent pipes.

FIG. Z-1392 PARK SPRINKLING VALVE AND CONTROL BOX, Frost Proof

Pipe Size A	H	Iron Box and Top I. S.	Iron Box and Top B. S.	Iron Box and Bronze Top I. S.	Iron Box and Bronze Top B. S.	Approx. Wt. Lbs.
¾"	36"	$53.20	$70.20	$66.20	$ 82.20	82
¾"	48"	55.70	78.50	67.70	90.50	86
¾"	60"	56.20	88.20	69.20	100.20	90
1"	36"	65.60	88.80	79.10	100.80	85
1"	48"	67.10	98.60	80.60	110.60	89
1"	60"	68.60	108.30	82.10	120.30	93

For school grounds, public parks, golf courses, swimming pools, and other locations where large control boxes are desirable for housing additional valves and connections for drinking fountains or other fixtures. Non-freezing valve, removable for repair without digging up connections.



Z-1392—I.P.S. Inlet, Hose Connection

FIG. Z-1395 WALL HYDRANT

A	B	C	D
¾"	2"	as spec.	5½"
1"	2½"	as spec.	5½"

A—¾" Size—Polished bronze face

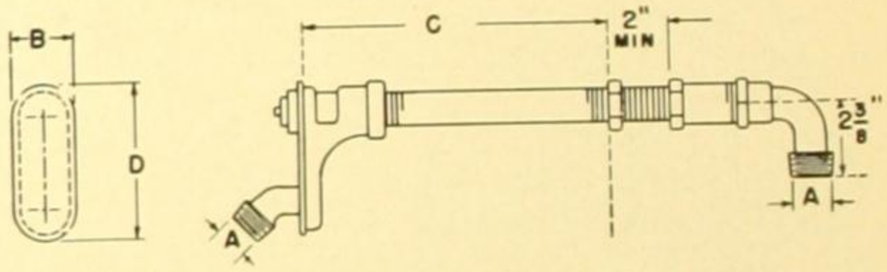
Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.	Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.
9"	$16.50	$19.70	7	24"	$24.00	$28.60	11½
11"	17.50	20.90	7½	26"	25.00	29.80	12
13"	18.50	22.10	8	28"	26.00	31.00	12½
15"	19.50	23.30	9	30"	27.00	32.20	13
16"	20.00	23.90	9½	32"	28.00	33.40	13½
18"	21.00	25.00	10	34"	29.00	35.60	14
20"	22.00	26.20	10½	36"	30.00	36.80	14½
22"	23.00	27.40	11				

A—1" Size—Polished bronze face

Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.	Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.
9"	$22.40	$25.00	9	24"	$31.40	$35.50	13½
11"	23.60	26.40	9½	26"	32.60	36.90	14
13"	24.80	27.80	10	28"	33.80	38.30	14½
15"	26.00	29.20	11	30"	35.00	39.70	15
16"	26.60	29.90	11½	32"	36.20	41.10	15½
18"	27.80	31.30	12	34"	37.40	42.50	16
20"	29.00	32.70	12½	36"	38.60	43.90	16½
22"	30.20	34.10	13				

Chrome plated face add 1.90
White metal face add 2.90

Z-1395



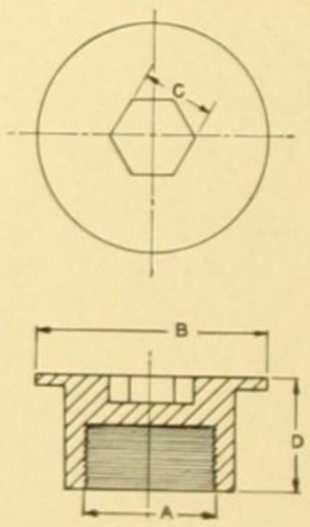
I.P.S. Inlet, Hose Connection

For outside hose connection to prevent freezing or tampering with valve. For public buildings, institutions, etc. Valve removable for repair without digging up connections.

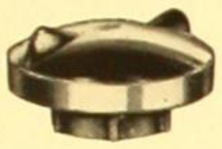
FIG. Z-1400 CAP CLOSURE

	Pipe Size A	B	C	D	All Bronze Pol.	All Bronze C. P.	Approx. Wt. Lbs.
Type "S"	⅜"	1¼"	⅜"	⅞"	$1.10	$1.30	½
Type "W"	1½"	3"	1"	1½"	2.70	3.20	1½

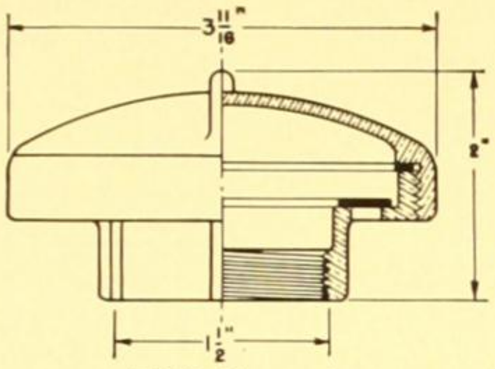
For use where water supply connections for future use are desired. Countersunk head on face for easy removal.



Z-1400



Z-1405

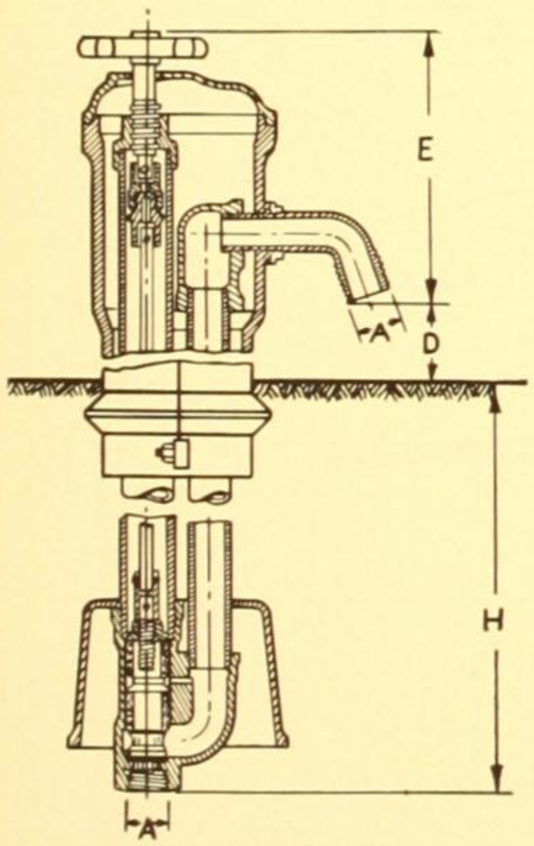


I.P.S. Connection

SYPHON PREVENTER — FIG. Z-1405

Complete, Each **$16.00**
Approx. Wt. Lbs. 6.

For emergency use on existing installations where siphonic action has developed on waste or vent lines. A simple vent relief which automatically releases entrained air in any vent line or chamber such as old type grease traps, etc.



Z-1480—I.P.S. Inlet, Hose Connection

COMPRESSION VALVE DRY PIPE HYDRANT, Full-Covered Casing — FIG. Z-1480

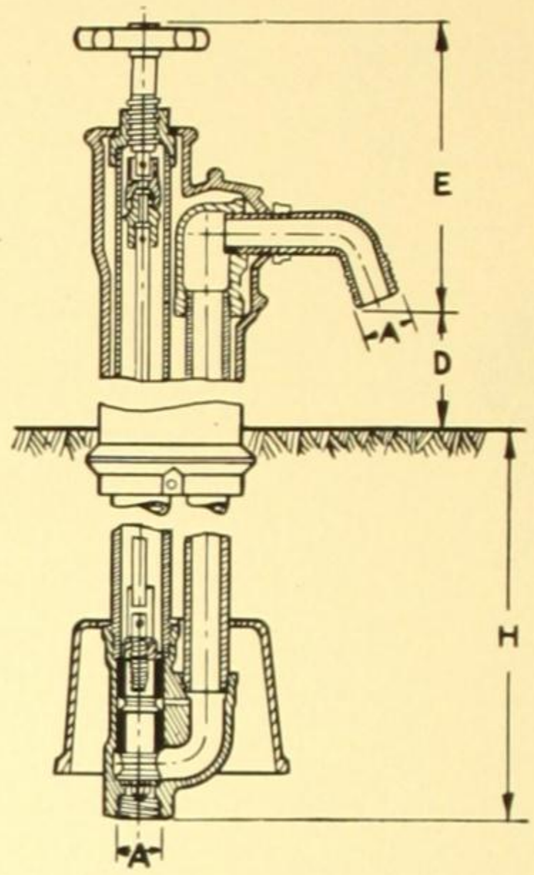
Depth H	¾"	Approx. Wt. Lbs.	1"	Approx. Wt. Lbs.	Pipe Size A	D	E
2'	$21.60	30	$40.50	35	¾"	18"	8 5/16"
3'	22.50	33	41.70	38	1"	18"	8¾"
4'	23.40	37	42.90	42			
5'	24.30	40	44.10	45			
6'	25.20	47	45.30	52			

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.

FIG. Z-1481 COMPRESSION VALVE DRY PIPE HYDRANT, Semi-Covered Casing

Depth H	¾″	Approx. Wt. Lbs.	1″	Approx. Wt. Lbs.	Pipe Size A	D	E
2′	$19.50	28	$31.90	33	¾″	18″	7″
3′	20.40	31	33.10	36	1″	18″	7¼″
4′	21.30	34	34.30	39			
5′	22.20	37	35.50	42			
6′	23.10	45	36.70	50			

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection

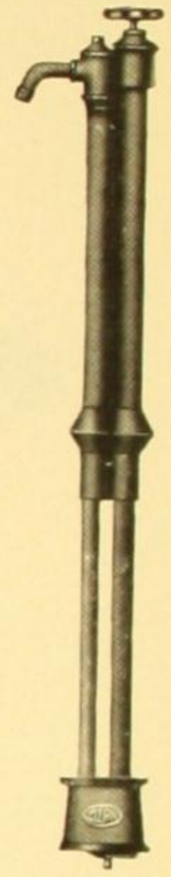
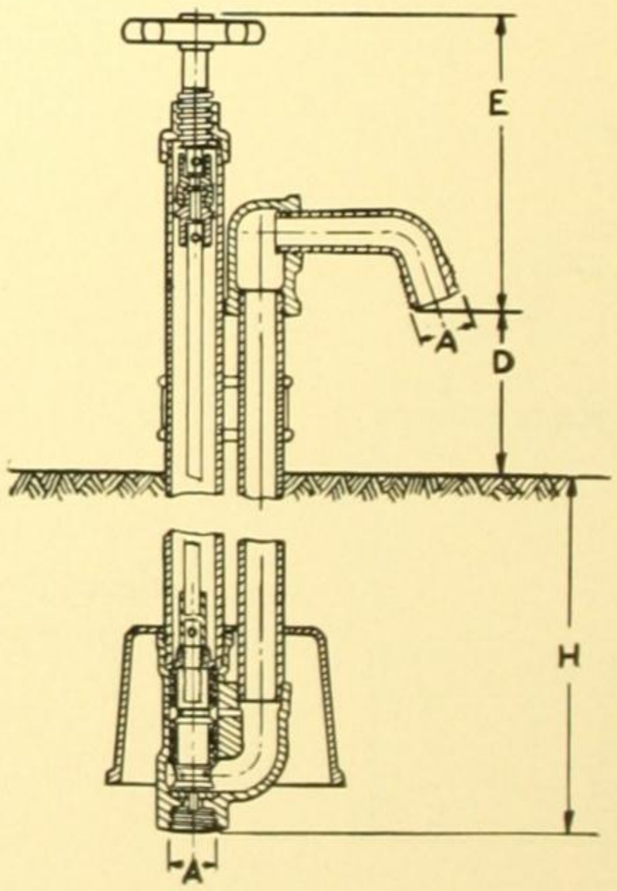

Z-1481

FIG. Z-1482 COMPRESSION VALVE DRY PIPE HYDRANT, Exposed Casing

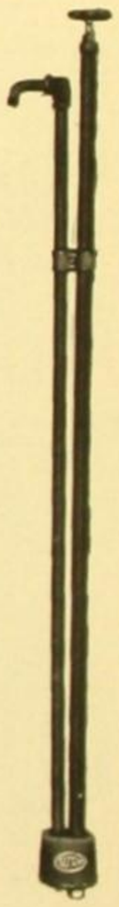
Depth H	¾″	Approx. Wt. Lbs.	1″	Approx. Wt. Lbs.	1¼″	Approx. Wt. Lbs.	1½″	Approx. Wt. Lbs.
2′	$15.00	17	$26.60	22	$51.00	25	$63.40	26
3′	15.90	21	27.80	26	52.60	29	65.30	30
4′	16.80	25	29.00	30	54.20	33	67.20	34
5′	17.70	28	30.20	33	55.80	36	69.10	37
6′	18.60	32	31.40	37	57.40	40	71.00	41

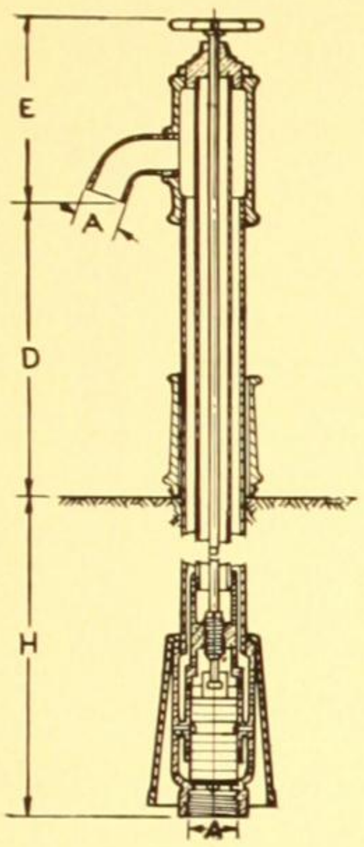
Pipe Size A	D	E
¾″	18″	7″
1″	18″	7¼″
1¼″	18″	7¾″
1½″	18″	7⅞″

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection


Z-1482

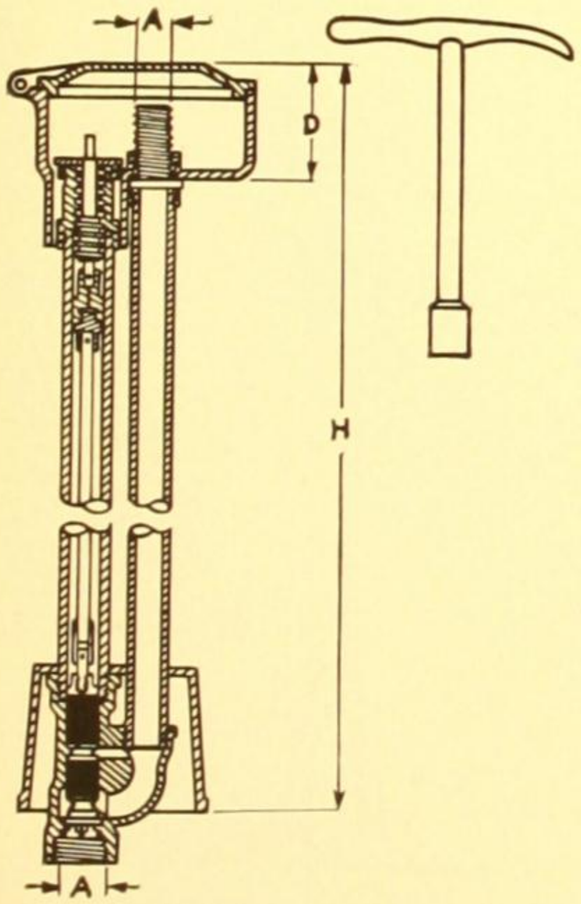


Z-1483—I.P.S. Inlet, Hose Connection

COMPRESSION VALVE HYDRANT — FIG. Z-1483

Depth	Heavy Duty 1½"	Approx. Wt. Lbs.	2"	Approx. Wt. Lbs.	Pipe Size A	D	E	H
2′	$70.50	38	$110.10	57	1½"	18"	6½"	as spec.
3′	73.90	42	116.50	62	2"	18"	7½"	as spec.
4′	77.30	46	122.90	67				
5′	80.70	50	129.30	72				
6′	84.10	54	135.70	77				
8′	87.50	58	142.10	82				
10′	90.90	62	148.50	87				

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection

Z-1490

COMPRESSION VALVE DRY PIPE STREET WASHER, Round Head — FIG. Z-1490

Depth	¾"	1"	1¼"	Pipe Size A	B	D	H
2′	$15.00	$26.60	$51.00	¾"	4⅝"	2⅛"	as spec.
3′	15.90	27.80	52.60	1¼"	7½"	2 13/16"	as spec.
4′	16.80	29.00	54.20				
5′	17.70	30.20	55.80				
6′	18.60	31.40	57.40				

I. P. ¾" Approx. Wt. Lbs. 2′—12, 3′—16, 4′—20, 5′—24, 6′—28.
I. P. 1" Approx. Wt. Lbs. 2′—15, 3′—19, 4′—23, 5′—27, 6′—31.
I. P. 1¼" Approx. Wt. Lbs. 2′—16, 3′—20, 4′—24, 5′—28, 6′—32.

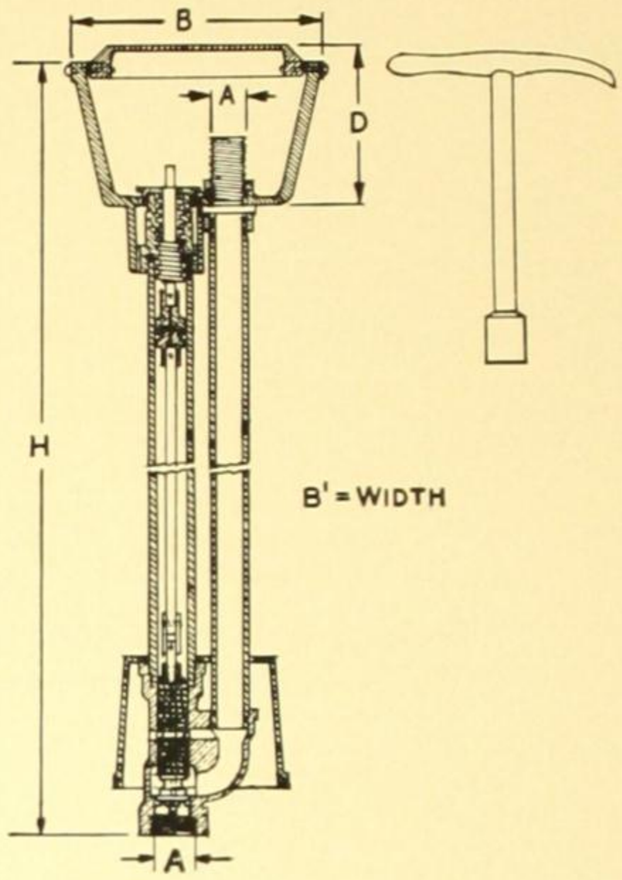
Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.

FIG. Z-1491 COMPRESSION VALVE DRY PIPE STREET WASHER, Square Head

Depth	¾″	1″	1¼″	Pipe Size A	B	B′	D	H
2′	$15.00	$26.60	$51.00	¾″	5½″	4 11/16″	2½″	as spec.
3′	15.90	27.80	52.60	1¼″		on request		
4′	16.80	29.00	54.20					
5′	17.70	30.20	55.80					
6′	18.60	31.40	57.40					

I. P. ¾″ Approx. Wt. Lbs. 2′—12, 3′—16, 4′—20, 5′—24, 6′—28.
I. P. 1″ Approx. Wt. Lbs. 2′—15, 3′—19, 4′—23, 5′—27, 6′—31.
I. P. 1¼″ Approx. Wt. Lbs. 2′—16, 3′—20, 4′—24, 5′—28, 6′—32.

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection

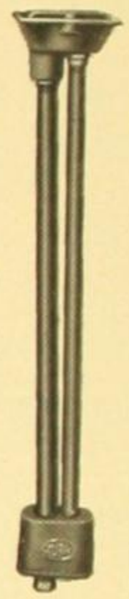
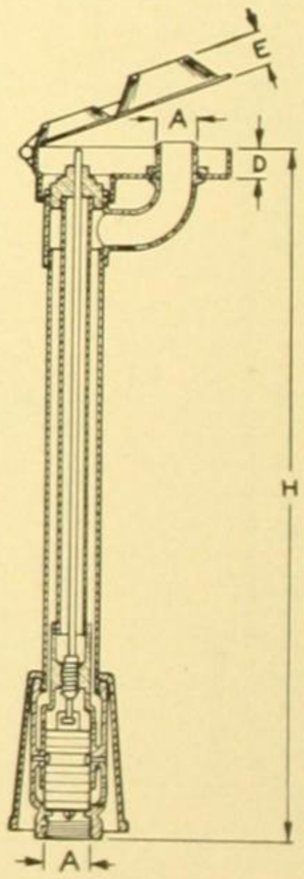

Z-1491

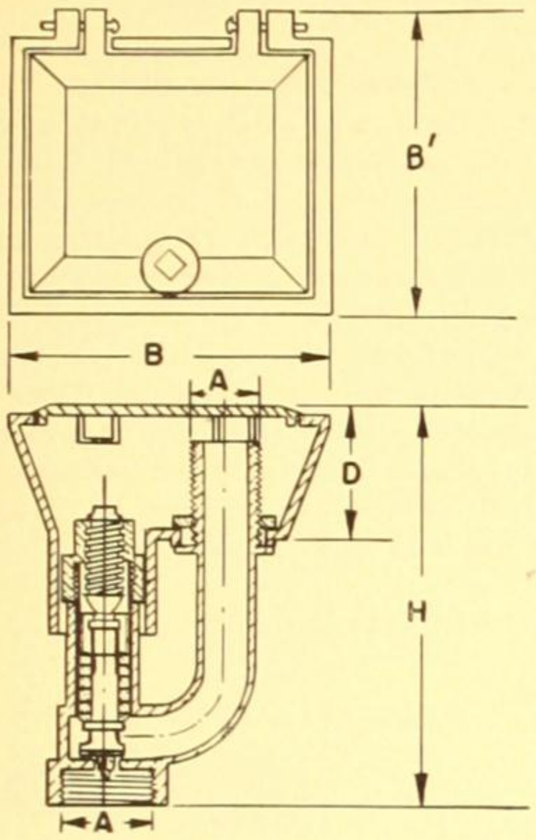
FIG. Z-1492 COMPRESSION VALVE STREET WASHER

Depth	1½″	Heavy Duty Approx. Wt. Lbs.	2″	Approx. Wt. Lbs.	Pipe Size A	D	E	H
2′	$70.50	23	$110.10	42	1½″	1⅛″	1 5/32″	as spec.
3′	73.90	26	116.50	47	2″	1¼″	1 5/16″	as spec.
4′	77.30	29	122.90	52				
5′	80.70	32	129.30	57				
6′	84.10	35	135.70	62				
8′	87.50	38	142.10	67				
10′	90.90	41	148.50	72				

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



Z-1492—I.P.S. Inlet, Hose Connection

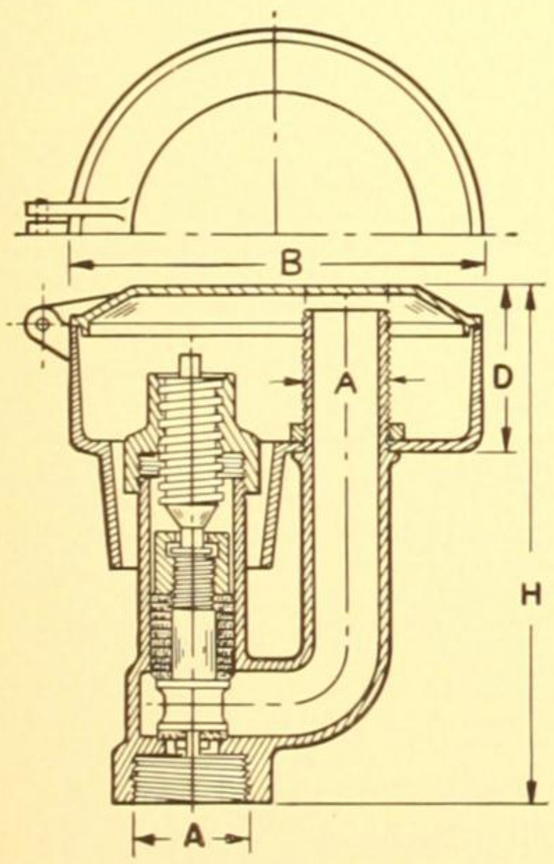


Z-1493—I.P.S. Inlet, Hose Connection

HOSE BOX—SHORT PATTERN STREET WASHER, Square Head FIG. Z-1493

Pipe Size A	B	B'	D	H	¾"	1"	Approx. Wt. Lbs.
¾-1"	5½"	4 11/16"	2½"	6 3/16"	$12.00	$16.00	7
Add for locking device					2.50	2.50	

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



Z-1494—I.P.S. Inlet, Hose Connection

HOSE BOX—SHORT PATTERN STREET WASHER, Round Head FIG. Z-1494

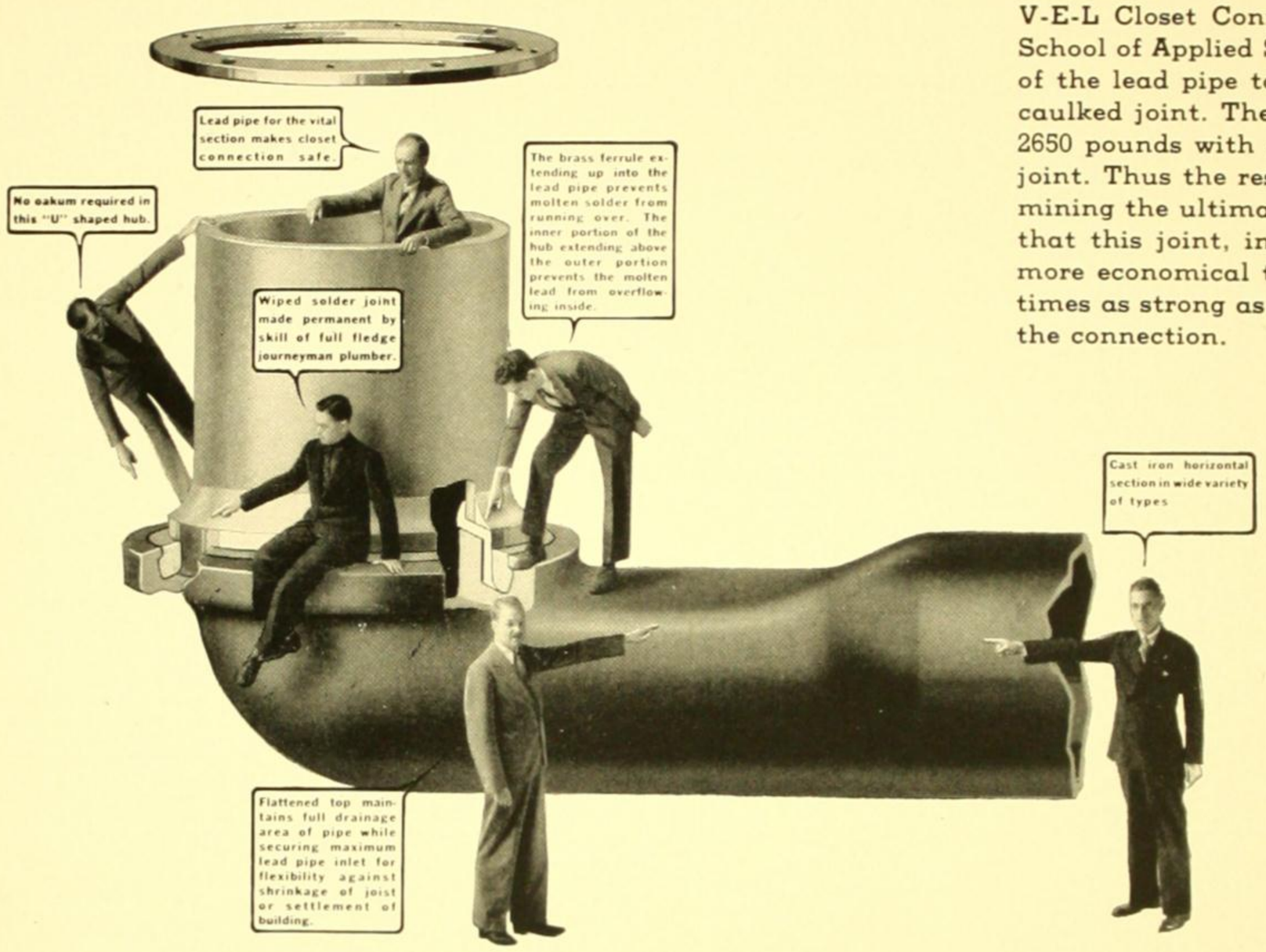
Pipe Size A	B	D	H	¾"	1"	Approx. Wt. Lbs.
¾-1"	4⅝"	2⅛"	5 11/16"	$12.00	$16.00	6
Add for locking device				2.50	2.50	

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.

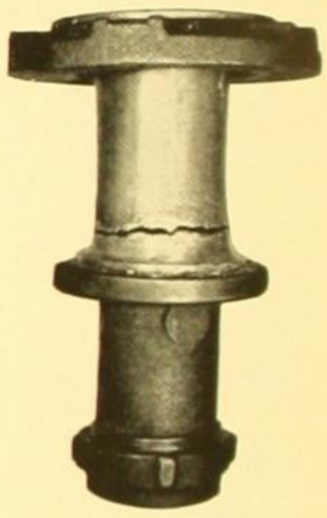
ZURN V-E-L CLOSET CONNECTIONS

V-E-L MEANS VITAL ELEMENT LEAD—A LEAD PIPE VITAL SECTION ON A CAST IRON CONNECTION

The test specimen illustrated below consisting of a piece of eight pound lead pipe and a wiped and caulked joint exactly as employed in the Zurn V-E-L Closet Connection was tested by the Case School of Applied Science, to compare the strength of the lead pipe to the strength of the wiped and caulked joint. The pipe failed at a pulling load of 2650 pounds with no deformation or effect on the joint. Thus the results of the test made for determining the ultimate strength of the joint indicate that this joint, in addition to being simpler and more economical to make, is approximately three times as strong as the lead pipe which it joins to the connection.



Z-2036—V-E-L Closet Connection



Test Specimen
(See Above)

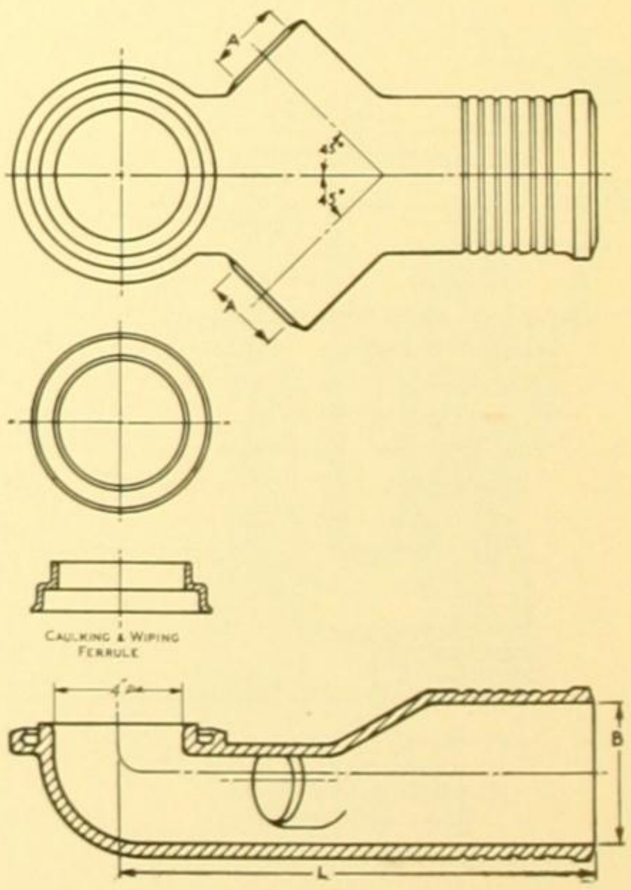
Flexible lead inlet on cast iron section makes closet connection permanently gas-tight and water-tight. Brass ferrule extending up into lead pipe prevents molten solder from running over. Inner portion of the hub extending above the outer portion prevents molten lead from overflowing inside. Flattened top of horizontal section maintains full drainage area of pipe while securing maximum lead pipe inlet for flexibility against shrinkage of joist or settlement of building.

FIG. Z-2036 V-E-L CLOSET BEND, Plain

Pipe Size	Length	Coated (DC)	Approx. Wt. Lbs.
3"	16"	$8.10	15
4"	16"	8.10	17

FIG. Z-2046 V-E-L CLOSET BEND, Two 45° Tappings

Pipe Size B	I. P. S. Tap A	L	Coated (DC)	Approx. Wt. Lbs.
3"	1½"	16"	$9.30	22
4"	1½"	16"	9.30	26



Z-2046—Lead Pipe Inlet, Soil Pipe Outlet

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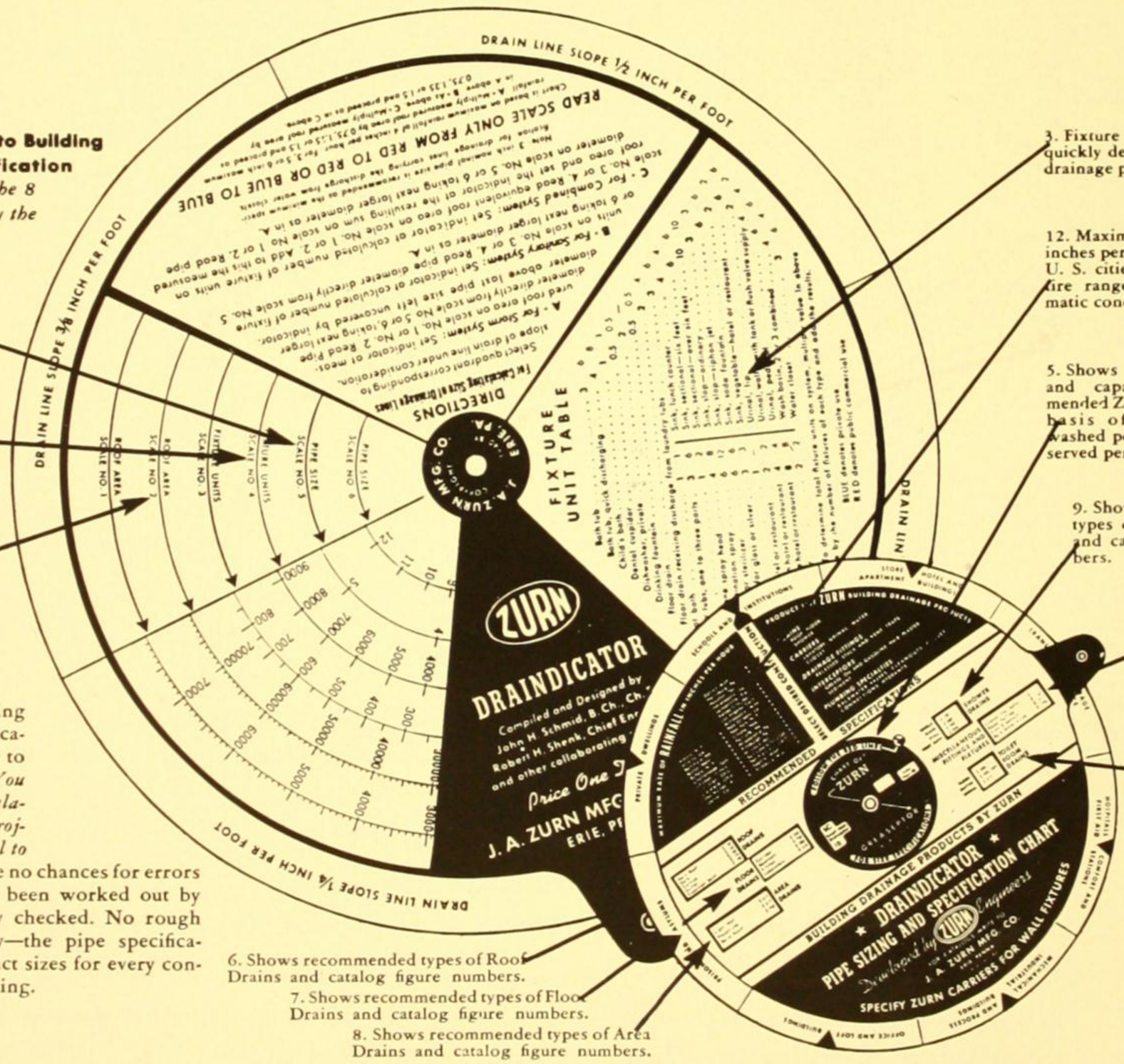
ANOTHER EXAMPLE OF ZURN SPECIALIZED ENGINEERING SERVICE FOR ARCHITECTS AND ENGINEERS

12 Instant Answers to Building Drainage Specification Problems *provided for the 8 major types of buildings by the* **Zurn Draindicator.**



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2. Fixture Unit Scale for determining sanitary drainage pipe sizes.

4. Roof Area Scale for determining storm drainage pipe sizes.

3. Fixture Unit Table for quickly determining proper drainage pipe sizes.

12. Maximum Rainfall in inches per hour in 30 major U. S. cities, embracing entire range of varying climatic conditions.

5. Shows type, application, and capacity of recommended Zurn Greaseptor on basis of GPM, pieces washed per hour and meals served per day.

9. Shows recommended types of Shower Drains and catalog figure numbers.

10. Shows recommended types of Miscellaneous Fixtures and Fittings and catalog figure numbers.

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6. Shows recommended types of Roof Drains and catalog figure numbers.

7. Shows recommended types of Floor Drains and catalog figure numbers.

8. Shows recommended types of Area Drains and catalog figure numbers.

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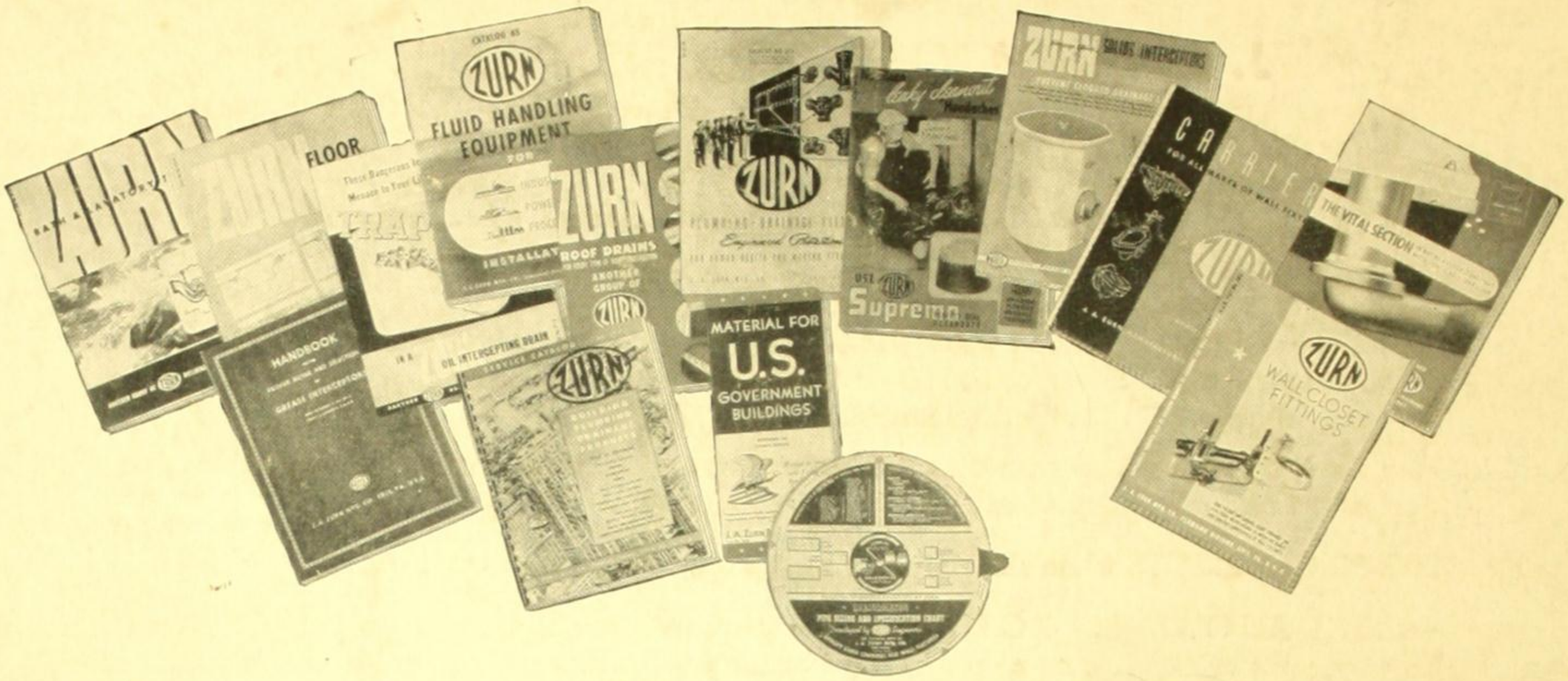

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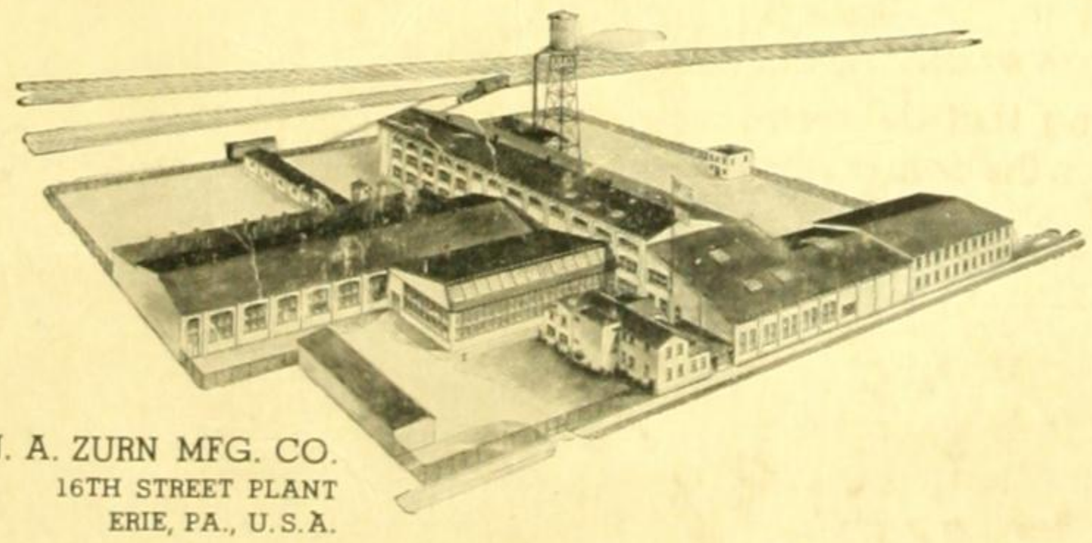

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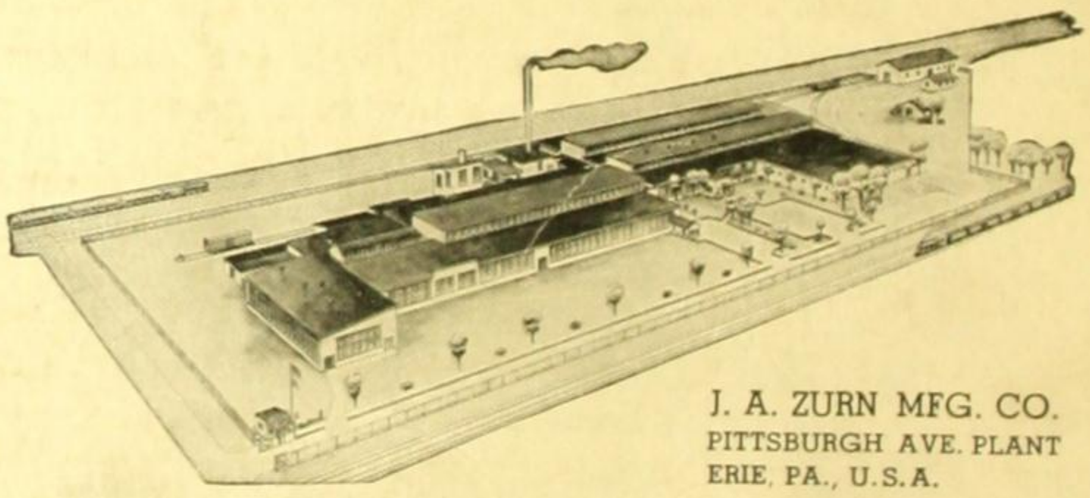

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